

BMC

Journal of the Canadian
Health Libraries Association

Bibliotheca Medica Canadiana

Le journal de l'Association des
bibliothèques de la santé du Canada

- Why Teaching Information Retrieval Skills to Clinicians Makes Sense
- Internet and Intranet Trends
- The Saskatoon Free-Net and Saskatchewan's Local Health Information Providers
- Internet Discussion Lists in Substance Abuse
- Invisible Users and Virtual Access
- Fact Sheet on Audiovisual Tips and Tricks
- Spotlight on Alberta :
PMHAB Learning Resource Centre
Merger Among Rationalization in Edmonton
John W. Scott Health Sciences Library
Calgary Regional Health Authority

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BIBLIOTHECA MEDICA CANADIANA

The *Bibliotheca Medica Canadiana* is a journal providing for increased communication among health libraries and health science librarians in Canada. A special commitment has been made to reach and assist the worker in the smaller, isolated health library.

The *Bibliotheca Medica Canadiana* is published quarterly by the Canadian Health Libraries Association. Opinions expressed herein are those of the contributors and the editor and not the CHLA/ABSC.



La *Bibliotheca Medica Canadiana* (BMC) a pour objet de permettre une meilleure communication entre toutes les bibliothèques médicales et entre tous les bibliothécaires qui travaillent dans le secteur des sciences de la santé. Nous nous engageons tout particulièrement à atteindre et à aider ceux et

celles qui travaillent dans les bibliothèques de petite taille et les bibliothèques relativement isolées.

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Editor's Message

Dean Giustini

The summer issue of *BMC* arrives on the coat-tails of a busy conference season - MLA in Seattle, and CHLA/ABSC in Vancouver. We hope this issue - *BMC*'s annual "theme issue" - has something of interest to all CHLA/ABSC members, even the most conference-weary.

Digital Trends

Our theme is digital information trends and the health sciences librarian. These days, electronic information is everywhere: CD-ROM, the INTERNET, the World Wide Web (WWW), to name but three.

New information sources make it possible for health science librarians to take on larger information-provider and teaching roles within organizations. Our traditional roles are changing, but others are emerging as opportunities.

Four of the five invited papers in this issue are Canadian, one paper each from the Maritimes, the West and two from central Canada: Grace Paterson and Tim Ruggles give us a detailed look at teaching information retrieval skills to medical students; Cheryl Martin and Jessie McGowan identify trends in Internet and Intranet management in hospitals; Darlene Fichter and Colleen Martin-Brownell describe a Free-Net project in Saskatoon for consumer health information and Sheila Lacroix provides a look at listservs and how they help those consumers in recovery from substance abuse.

The fifth paper is American: Terry Henner, Head Librarian, Savitt Medical Library at the University of Nevada provides many insights into starting a bibliographic instruction program for remote users.

1997 CHLA/ABSC Conference in Vancouver

Congratulations to the Vancouver organizers for planning and hosting a successful conference. Over the next year, *BMC* will be publishing several of the featured papers and presentations.

BMC Makes Appearance at MLA in Seattle

Extra copies of *BMC* were handed out to exhibitors at the MLA Conference in Seattle. The editors of *BMC* hope that we can

promote the journal at conferences such as MLA as well as interest exhibitors to advertise their products in *BMC*.

Results of the BMC Survey

Preliminary results of the *BMC* Survey were presented at the Annual General Meeting at CHLA/ABSC in Vancouver. Two significant findings: more than a majority of members are satisfied with the current hard-copy of *BMC*, but a similar majority suggest we look further into Web publishing. A full analysis of the *BMC* Survey will appear in the next *BMC*.

Part II of Spotlight on Alberta

This issue also contains the second part of a two-part series on how health care cuts have affected libraries in Alberta, both in the major cities and rural areas.

Letters to the Editor

Give the *BMC* editors feedback! We had one letter to the editor since our last issue. In response to Rita Vine's *Cyberpulse Free MEDLINE* column:

To *BMC* Editors:

We (the librarians here) read Rita Vine's article on free MEDLINE on the Web with interest. In the fall, we were concerned about the number of students using Web-based MEDLINE. We developed a handout to encourage users to evaluate not only the search engine, but the entire MEDLINE service (e.g., help for search strategy development, frequency of updates, document delivery, etc.).

This handout is now available at the following URL:
<http://stauffer.queensu.ca/webmed/guides/medeval.htm>

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[A comprehensive list of free and fee-based access to MEDLINE can be located at the Medical Matrix WWW site <http://www.medmatrix.org/info/medlinetable.html>] ■

A Word from the President

Susan Murray

Our weather here over the past few months has mirrored Ontario's uncertain health care climate - bitterly cold one day with hopes of spring the next. Budget cuts, staff layoffs, organizational mergers and closures are a part of daily life now.

Some hospitals on the closure list are not going quietly: an active campaign to save Women's College Hospital has started and other special focus and community-based hospitals could follow suit. It's an unsettled time for those of us in the healthcare scene.

Board Meeting in Ottawa

The Board met for two long days in Ottawa with a complete agenda and full room of guests: Karen Adams (Executive Director of CLA), Bernard Dumouchel (CISTI Director of Operations) and Chris Sugar (CISTI Project Officer), Elizabeth Hawkins-Brady (President of the Ottawa Valley Health Libraries Association) and Pat Johnston (Chair of the '98 Conference). Betty Sutherland, Chair of the Association of Canadian Medical Colleges (ACMC), attended the Board meetings as a non-voting member as usual.

Halifax in 1999

It's official that the 1999 Conference will be held in Halifax! Since stopping there on my way back from the '95 Conference in St. John's, I've wanted an excuse to return to this Maritimes jewel. An update to the 1998 Conference is that it will be held in Hull, Quebec - the first time that a CHLA/ABSC Conference is to be held in 'la belle province'.

Task Force Work

The Task Force on Resource Sharing (TFRS) met in Ottawa prior to the Board meetings. They prepared a thoughtful, complete response to the CISTI follow-up to the *Discussion Paper on Resource Sharing in Health Sciences Libraries in Canada*.

The TFRS's considerable accomplishments will be shared during the '97 Conference via a poster session and update on Saturday morning. To continue the important links that the TFRS has forged with chapters and key organizations such as CISTI and the National Library of Canada, a new task force on resource sharing will be established. Stay tuned to *BMC* for an updated list of the Task Force members.

Judy Inglis reported on the Task Force on the National Health Libraries Survey (see page 152). After brainstorming, the committee recommended that the terms of reference and name be changed to the Task Force on Benchmarking for Health Libraries. The revised mandate is "to develop and pilot test a practical benchmarking instrument for Canadian health libraries and a proposal for implementation." A pretested draft data collection instrument will be presented to the membership at '97 Conference to allow for input.

Two Initiatives - Joanne Marshall and Jim Henderson

Many health science librarians have been frustrated in recent years by an inability to move ahead without a national health

sciences coordinating body in Canada. I am excited to report that CISTI has expressed interest in discussing a national health libraries network.

Two initiatives provided the background for our discussion: 1) Joanne Marshall's *A National Health Library Network for Canada: A Brief Concept Paper* based on her 1995-96 Health Canada Libraries Review study; and 2) Jim Henderson's *Knowledge for Canadian Health Care Through a Health Libraries Assistance Act: A Proposal*.

Lois Wyndham and I have been developing a plan of action, in consultation with CISTI, Joanne, Jim and other key players and organizations. We hope to get your feedback regarding the initiatives at the '97 Conference in Vancouver.

CHLA/ABSC Advocacy Kit

We are making headway with the CHLA/ABSC advocacy kit. Lois Wyndham is putting the finishing touches on the kit, which should be available shortly. We are investigating sending a Board member to CLA's Advocacy workshops with a view to "train other trainers" within CHLA/ABSC.

Copyright - Bill C-32

Further to the Board meeting, I have been actively expressing our disapproval of the revised *Bill C-32: An Act to Amend the Copyright Act*. The revised *Bill* virtually eliminated the reasonable exceptions for libraries and educational institutions. When we have a definite answer as to which Committee will be responsible for reviewing the *Bill*, I will write for CHLA/ABSC to speak to the *Bill*. If successful, local member Jessie McGowan (and CCHSA Assistant Rep) will speak on behalf of CHLA/ABSC.

Position Yourself for Success

On a more upbeat note, I was energized by the satellite video-conference *The Future for Librarians: Positioning Yourself for Success* on March 20th co-sponsored by MLA, SLA, and the American Association of Law Libraries. Featuring two legal librarians and two librarians in the medical area, Joanne Marshall and Bernie Todd Smith, the sessions provided an opportunity for viewers to ask questions.

The unique skills of special librarians and the need for life-long learning were emphasized. MLA plans shortly to make a tape of the conference available for \$49 US or an educational package for \$275 US that includes a tape, workbook, evaluation forms and certificates for CE contact hours. Chapters interested in the educational package can apply for money from the CHLA/ABSC Professional Development Fund. Watch the MLA web page www.kumc.edu/MLA for details about the educational package.

Finally, I look forward to seeing many of you at our 21st Annual Conference in Vancouver, May 28 to June 1 and hearing your opinions on what's happening within CHLA/ABSC and elsewhere in the health library community. ■

Un Mot de la présidente

Susan Murray

La température que nous avons eu ici en Ontario au cours des derniers mois semble refléter le climat d'incertitude qui règne dans nos soins de santé; froid sibérien un jour et température printanière le lendemain. Les réductions budgétaires, les mises à pied de personnel, les fusions et les fermetures d'organisme font maintenant partie de notre lot quotidien.

Certains hôpitaux qui figurent sur la liste des fermetures ne font pas qu'assimiler calmement la nouvelle. Une campagne active visant à sauver l'hôpital Women's College vient de commencer et d'autres hôpitaux spécialisés ou communautaires pourraient bien emboîter le pas. Pour ceux et celles qui oeuvrent au sein de la communauté des soins de santé, il s'agit d'une période fort mouvementée.

Réunion du Conseil à Ottawa

Le Conseil s'est réuni pendant deux longues journées à Ottawa. Nous avions un ordre du jour fort rempli et toute une liste d'invités: Karen Adams, directrice générale de la CLA; Bernard Dumouchel, directeur du Service d'exploitation de l'ICIST; Chris Sugar, agent de projet de l'ICIST; Elizabeth Hawkins-Brady, présidente de l'Association des bibliothèques de la santé de la vallée de l'Outaouais; et Pat Johnston, présidente du Congrès 1998. Comme d'habitude, Betty Sutherland, présidente de l'Association des facultés de médecine du Canada, assistait aux réunions du Conseil en tant que membre sans droit de vote.

Halifax 1999

C'est maintenant confirmé que le Congrès 1999 se tiendra à Halifax! Depuis que j'avais fait un arrêt à cet endroit à mon retour du Congrès 1995 de St. John, je me cherchais une excuse pour retourner dans ce joyau des Maritimes. Le Congrès 1998 se tiendra à Hull au Québec. Il s'agit de la première fois qu'un congrès de l'ABSC/CHLA se déroule dans la belle province.

Réalisation du Groupe de travail

Le Groupe de travail sur le partage des ressources (GTPR) s'est réuni à Ottawa avant les réunions du Conseil. Les membres du GTPR ont élaboré une réponse complète et judicieuse au suivi de l'ICIST concernant le *Document de discussion sur le partage des ressources dans les bibliothèques de la santé du Canada*.

Les grandes réalisations du GTPR seront diffusées au cours du Congrès 1997 par l'intermédiaire d'une présentation par affiches et d'une mise à jour le samedi matin. Pour prolonger les liens que le GTPR a tissé avec les chapitres et les principales organisations telles que l'ICIST et la Bibliothèque nationale du Canada, un nouveau groupe de travail a été mis sur pied. Consultez *BMC* pour obtenir une liste à jour des membres de ce nouveau groupe de travail.

Judy Inglis a produit son rapport concernant le Groupe de travail sur le sondage national des bibliothèques de la santé (voir page 152). Après une séance de remue-méninge, le Comité a recommandé que l'on change le mandat et le nom de ce groupe de

travail pour Groupe de travail sur l'évaluation du rendement des bibliothèques de la santé. Le nouveau mandat est «d'élaborer et de tester des outils pratiques pour évaluer le rendement des bibliothèques de la santé du Canada et d'émettre une proposition pour la mise en oeuvre de ces outils». Ces outils qui serviront à recueillir des données et qui auront été testés seront présentés aux membres du Congrès 1997 qui pourront alors faire connaître leurs commentaires.

Deux projets - Joanne Marshall et Jim Henderson

Au cours des dernières années, bon nombre de bibliothécaires des sciences de la santé se sont sentis frustrés par une incapacité à progresser sans l'existence d'un organisme de coordination des sciences de la santé à l'échelle canadienne. Il me fait extrêmement plaisir de vous faire part que l'ICIST a exprimé son intérêt à mener des discussions sur la création d'un réseau national de bibliothèques de la santé.

Deux projets nous offrent une toile de fond pour notre discussion: 1) *A National Health Library Network for Canada: A Brief Concept Paper* (un réseau national des bibliothèques de la santé pour le Canada: bref document d'élaboration du concept) de Joanne Marshall qui se fonde sur son étude de 1995-1996 des bibliothèques de santé du Canada; 2) *Knowledge for Canadian Health Care Through a Health Libraries Assistance Act - A Proposal* de Jim Henderson (connaissance des soins de santé canadiens par l'intermédiaire d'une loi visant à aider les bibliothèques de la santé).

Lois Wyndham et moi avons élaboré un plan d'action de concert avec l'ICIST, Joanne, Jim et d'autres intervenants et organismes importants. Nous espérons que vous nous ferez part de vos commentaires en ce qui a trait à ces projets au cours du Congrès 1997 de Vancouver.

Trousse de défense de nos intérêts de l'ABSC/CHLA

Nous avons fort progressé dans la préparation de notre trousse de défense de nos intérêts. Lois Wyndham est en train d'y mettre la touche finale et la trousse devrait être disponible sous peu. Nous étudions présentement la possibilité d'envoyer un membre du Conseil aux ateliers de défenses des intérêts de la CLA avec l'objectif de former d'autres personnes qui offriront cette formation au sein de l'ABSC/CHLA.

Droits d'auteurs - Projet C-32

Suite à la réunion du Conseil, j'ai activement exprimé notre désapprobation sur la version révisée du projet de *loi C-32, soit la Loi modifiant la Loi sur le droit d'auteur*. Le nouveau projet de loi élimine virtuellement les exemptions fort raisonnables des bibliothèques et des institutions d'enseignement. Dès que nous aurons une réponse définitive du Comité chargé d'étudier ce projet de loi, j'écirai une lettre au nom de l'ABSC/CHLA pour me prononcer sur le projet de loi. Si cela est possible, Jessie McGowan, membre régional et représentante adjointe de la CCHSA, prendra la parole au nom de l'ABSC/CHLA.

Placez-vous en situation pour connaître le succès

Sur une note plus optimiste, la vidéoconférence par satellite *The Future for Librarians: Positioning Yourself for Success* (l'Avenir des bibliothécaires : placez-vous en situation pour connaître le succès) du 20 mars et coparrainée par la MLA, la SLA et l'*American Association of Law Libraries* m'a remplie d'énergie. Au cours de cette vidéoconférence, on y a entendu deux bibliothécaires juridiques et deux bibliothécaires du secteur médical, soit Joanne Marshall et Bernie Todd Smith. Ces sessions ont permis à l'auditoire de poser des questions.

On a souligné les compétences particulières des bibliothécaires et la nécessité de parfaire son apprentissage tout au long de sa vie. La MLA prévoit sou peu de distribuer une bande sur le Congrès au

prix de 49 \$ américains de même qu'une trousse de formation au prix de 275 \$ américains qui comprend une bande, un cahier de travail, des formulaires d'évaluation et des certificats pour les heures créditées de formation professionnelle. Les chapitres intéressés par cette trousse de formation peuvent obtenir des fonds par l'intermédiaire du Fonds de développement professionnel de l'ABSC/CHLA. Pour de plus amples renseignements sur cette trousse, consultez la page Web de la MLA à l'adresse électronique www.kumc.edu/MLA.

En terminant, j'ai bien hâte de voir bon nombre d'entrevous lors de notre 21^e Congrès qui aura lieu à Vancouver du 28 mai au 1^{er} juin prochain. Cela me permettra de recueillir vos opinions sur ce qui se passe au sein de l'ABSC/CHLA et ailleurs au sein de la communauté des bibliothèques de la santé. ■

FORTHCOMING SELECTED PAPERS

in *BMC* 19 (1) Fall 1997

- 1) *The Williamson Health Sciences Library at the Ottawa Civic Hospital : a survey to evaluate customer satisfaction.*
Kyungja Shin, Librarian.
- 2) *From container to contents : reorganization of the St. Michael's Health Science Library in Toronto.*
Jeffrey D. Edelson, M.D.; **Anita Wong**, Librarian Manager.
- 3) *Reference desk hours in academic medical school libraries : an analysis of survey responses from medical school libraries in Canada and the United States.*
Gwynneth T. Heaton.
- 4) *An analysis of the results of the 1997 BMC Survey.*
Laurie Blanchard, **Dean Giustini**.
- 5) *The Centre for Nutrition and Environment of Indigenous Peoples (CINE) : mission and activities.*
Bruce Grainger.

Why Teaching Information Skills to Clinicians Makes Sense : A Medical Informatics Perspective

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I. Introduction

Today's medical students will be the clinicians of the next millennium - an era in which computers and telecommunications will be a dominant feature of clinical practice.

Medicine is knowledge-based. The clinician's central job is to meet the needs of patients by drawing on accumulated medical knowledge over 5,000 years.(1) Biomedical knowledge doubles every 19 years and increases four-fold during a professional lifetime.(2) Staying current is a major challenge to the health professional.

Many recent medical education reports - such as ACME-TRI, CanMEDS 2000 and MOCOMP - recommend the teaching of informatics in medical schools. At Dalhousie Medical School, we continue to develop the curriculum to respond to the information needs of students and the recommendations of these reports. Dalhousie medical students must demonstrate that they are able to search, retrieve and organize information from a variety of computerized information sources.

Medical informatics (MI) is an emerging field. MI is concerned with the organization and management of information to support patient care, education, research and administration. The application of medical informatics relies on the use of computers and communication technology to translate theories from the fields of information science, cognitive science, decision theory, education psychology and computer science into practice.(3)

II. Rationale - Why Offer Courses in Medical Informatics?

Integrating MI into the curriculum is an ongoing process at Dalhousie Medical School. Initially, core competencies in eight areas of MI were identified as important in successful clinical practice:

- 1) computer literacy,
- 2) telecommunications,
- 3) information retrieval and management,

- 4) computer-aided learning,
- 5) patient management,
- 6) office practice management,
- 7) hospital information systems and
- 8) consumer health information.

Today's medical students will be the clinicians of the next millennium - an era in which computers and telecommunications will be a dominant feature of clinical practice.

J. Elizabeth Sutherland, Head Librarian at W.K.K. Kellogg Library, contributed to the rationale in the areas of information retrieval and management.(4)

The American Association of Medical Colleges (AAMC), in its 1986 medical informatics symposium, concluded that "...medical informatics is basic to the understanding and practice of modern medicine." This idea is also expressed in AAMC's 1992 ACME-TRI

Report:

"To practice medicine in the twenty-first century medical students educated in the twentieth century must be given a strong grounding in the use of computer technology to manage information, support patient care decisions, select treatments, and develop their abilities as lifelong learners."(5)

The CanMEDS 2000 report - accepted by Canada's Royal College of Physicians and Surgeons (RCPSC) - defined key competencies of specialist physicians for the next millennium. This report identifies an important competency as: an ability to "access and apply relevant information and therapeutic options to clinical practice".(6)

The Royal College of Physicians and Surgeons of Canada has developed the Maintenance of Competence Program (MOCOMP). The information management tool, PCDiary, is used to record ongoing self-directed learning and facilitates the sharing and review of clinical learning items within peer groups. The MOCOMP program emphasizes the role of physician as an information agent for the patient.

Physician-patient encounters influence decisions

Patient information has become increasingly available on the WWW from the National Institutes of Health, various health sites

and support groups in "cyberspace". Patient knowledge affects the physician-patient encounter. Informed patients can influence clinical policy. The February 1997 issue of *Consumer Reports* and Spring 1996 issue of *Bibliotheca Medica Canadiana (BMC)* review online medical information sites, which are widely-accessible by members of the public.(7)

Now, patients are better equipped to share clinical decision-making with their physicians. Patients are motivated to learn and have the skills and time to obtain information online. However, the clinician must assess the reliability of any information found online and determine whether it can be applied to a patient's particular health condition.

III. Need for Clinical Information

The need for clinically-sound information has never been considered more important. And yet, in a 1985 study, Covell discovered that physicians pursued about 30 per cent of questions raised during patients visits.(8) In 1992, Ely found that family physicians sought answers to only one clinical question for every 15 patients seen.(9) In 1995, Gorman and Helfrand reported that physicians pursued 56 per cent of the questions they thought were most likely to have answers and 50 per cent of those were judged to be urgent.(10)

In these studies, physicians chose to do computer searches of the medical literature only a small percentage of the time. The 1995 study found that medical textbooks, clinical manuals and drug information sources accounted for 49.5 per cent of sources used. Human sources of information (consultants, colleagues and non-physicians such as pharmacists and technicians) accounted for another 40.5 per cent. In two instances, computer searches were performed and only one of those was done by a librarian.

The findings of the Gorman study, taken with earlier reports, suggest a "two-stage information-seeking process in which the first decision, whether to pursue new information, is driven by the expected benefit, while the second decision, how to pursue the information, is driven by the relative access costs of available resources"(11) Other studies report that ease of access as well as ease of use of information sources are additional factors that influence information-seeking processes.

In a 1996 BMJ article, the types of information that are needed by clinicians were categorized into six areas:

- 1) information about particular patients;
- 2) data on health and sickness within local populations;
- 3) general medical knowledge;
- 4) local information about doctors available for referral, etc.;
- 5) information on local social influences and expectations and
- 6) information on scientific, political, legal, social, management and ethical changes that will affect both how medicine is practised in a society and how doctors will interact with individual patients.(12)

Medical knowledge is found in textbooks, journals, electronic databases and other sources of information. Matching the information found to an individual patient is the challenge. The challenge

in informatics is to make information sources commonly used by doctors more useful. The ideal information source must be directly relevant, contain valid information and be accessed with a minimal amount of work.

IV. The Information-seeking Steps

In the CanMEDS 2000 report, one of the core competencies is "the ability to ask appropriate patient-related questions, execute a systematic search for evidence, and critically evaluate the medical literature to optimize clinical

decision-making."(13)

There is a three-step process implied here:

- 1) First, clinicians must decide what needs to be known about a particular patient care problem or question. This is largely a cognitive process in which the clinician assesses the problem based on her/his knowledge.
- 2) If more information is needed, clinicians will select and execute a search for information that will provide the best available evidence.
- 3) The third step is to evaluate the information gathered and apply the knowledge gained to the clinical situation at hand.

Each step in this information-seeking process is critical and interdependent. The challenge for the physician is: Where can the best evidence to support a clinical decision be found? Shall the patient be treated, or not? What diagnostic tests are necessary? How can the physician advise the patient on any number of issues pertaining to his or her healthcare?

Academic health librarians and medical informaticians have a role to play here. They can ensure that medical students receive sufficient training to use a variety of databases and learn the necessary skills to retrieve the most relevant information. Tools such as the Internet and the World Wide Web (WWW) have put a wide range of databases at the clinician's disposal. If solid evidence exists in the medical literature, the clinician must find and utilize it or it will be of value to no one.

V. Electronic Sources of Information

To start, we can provide searchers with a conceptual overview of the medical literature and its structure. Searchers must know the lay of the land: what databases give access to primary biomedical literature and what sources yield secondary and tertiary types of clinical information.

Generally, biomedical knowledge proceeds from:

- 1) the laboratory bench to clinical trials involving human subjects
- 2) to systematic reviews and meta-analyses
- 3) to practice guidelines and consensus development statements

To best use a large database like MEDLINE, the medical student must learn how to efficiently retrieve clinically-relevant and scientifically-significant studies. Searchers must learn how to search for controlled clinical trials (especially those that have been randomized to minimize bias) and cohort studies to find appropriate therapy, diagnosis, etiology and prognosis studies.

The need for clinically-sound information has never been considered more important. And yet, in a 1985 study, Covell discovered that physicians pursued about 30 per cent of questions raised during patients visits.

Searchers must also distinguish between narrative and systematic reviews, and learn how to find the latter. New databases such as the Cochrane Library are making it easier to find these studies. Cochrane Library provides full-text systematic reviews and structured abstracts as well as bibliographical references to randomized controlled trials (RCTs).

Tertiary forms of literature

The tertiary form of literature commonly known as 'practice guidelines' is proliferating. These publications can be found at many WWW sites such as the Canadian Medical Association in the CPG Infobase.(14) Another excellent source of guidelines is the Agency for Health Care Policy and Research, available at the National Library of Medicine's Health Services/Technology Assessment Text (HSTAT) database. The Consensus Development Conference Statements in the NIH Consensus Development Program are in HSTAT.

Other efforts to synthesize the literature for busy clinicians include journal clubs. For example, the ACP Journal Club and the Journal of Family Practice Journal Club.(15) Each article is followed by expert commentary placing articles in clinical perspective. *Bandolier* - a monthly journal produced in Oxford for the National Health Service R & D Directorate - provides reviewed summaries of the literature. A freely accessible, online version is available via the Internet, although it is not as up-to-date as the journal.

Specialized databases offer information

In addition, there is a wide variety of specialized databases that provide useful clinical information: AIDSLINE, TOXLINE, and Cancerlit are examples. The Information Sources Map of the Unified Medical Language System (UMLS) supplies the Internet URL for these sources.(16) Physician Data Query (PDQ) and Cancernet are full-text sources of information on cancer, updated by the National Cancer Institute and reviewed each month by experts. PDQ also maintains a registry of clinical trials in oncology. Additionally, Online Mendelian Inheritance in Man (OMIM), a full-text database available on the Web, gives insight into genetic disorders.

Drug information sources, textbooks such as Scientific American Medicine (CD-ROM equivalent - SAM-CD) with its evidence-based approach, and combined reference/full-text databases such as STAT-REF provide clinicians with ready access to authoritative sources. However, as these examples show, clinicians must make choices about what sources of information would best satisfy a given information need.

VI. Questions Can Be Adequately Answered

In a study of the information needs of doctors treating HIV, health professionals were asked to identify questions that can be

adequately answered using print and electronic resources. Then, the study's authors - trained in library and information science - answered the questions. In the first phase, they searched standard textbooks and then four electronic databases. In the second phase, they tried to answer the remaining questions by reading printed material related to AIDS and by conducting other online reviews. In all, only 8 per cent of questions were not answered. The majority of questions were answered in an average of 10 minutes in phase I, and of those 8 per cent were answered with online sources.(17)

A review of the search strategies that influenced the clinical decision-making process showed: information that is available to clinicians is not used in routine patient care.(18) One way to address this is obvious: equip the physician with the information-retrieval skills he needs to search with confidence and without a huge outlay of time.

VII. Information Retrieval Skills Set - MEDLINE

MEDLINE is the largest and most complex database for the clinician to master. Many studies have enumerated the reasons for failed or poor searches in MEDLINE. Foreman and Glasgow (1994) summarize some of the most common clinical end-user difficulties with MEDLINE:

- a lack of understanding of content and structure of the database;
- confusion in the use of Boolean logic;
- failure to use explosions when appropriate;
- failure to use subheadings as needed;
- failure to use the controlled vocabulary and
- unawareness of the incompleteness of search results.(19)

Students at Dalhousie receive fairly detailed instruction of MEDLINE's special features. In addition to basic techniques, other important skills include: knowing when to choose certain tree structures in MeSH and exclude others, when to use the explode feature and when not to, when and how to use subheadings as well as how to correctly apply Boolean operators.

These skills, however, are not enough. Students must also be taught a number of other skills pertaining to MEDLINE:

- how to search by methodology;
- how to incorporate appropriate publication types into a search;
- how to recognize and use structured abstracts;
- becoming knowledgeable about MEDLINE's limitations;
- learn when to use textword or keyword approaches, thesaural terms and textword combinations.(20)

Until 1991, MEDLINE did not employ publication types like "Randomized Controlled Trials". For articles prior to 1991, searchers need to use a textword approach. Searchers should know what search strategies are used to find literature on therapy trials (RCTs, phase III and IV clinical trials) and when searching for diagnosis studies will require terms such as "sensitivity and specificity",

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"predictive value of tests", "false negative reactions", "false positive reactions", and so on.

Other sophisticated search techniques

Sophisticated search techniques require a deeper understanding of MEDLINE. In etiology studies, methodologies likely to be used are retrospective case-control studies or longitudinal cohort studies. Listing risk or risk factors are helpful in locating this type of study. Prognostic information is likely to be found under added terms such as morbidity, prevalence, incidence, mortality, survival rate and cohort studies. The MeSH term "prognosis" is not often used by NLM indexers so using a textword approach - such as "prognos*" and "natural and history", "predict*" and "outcome*" - is needed.

As far as publication type is concerned, students must learn that "meta-analysis" has been used since 1993, but that "systematic review" is not used. Searchers must rely on textword searching to retrieve these important sources of evidence. (This information was given during a 1996 workshop given by Ann McKibbin and Cindy Walker-Dilks at the Canadian Health Libraries Association meeting in Toronto on Evidence-based Medicine).(21)

Teaching MeSH and medical vocabularies to improve retrieval

In future editions, the Cochrane Library will employ MeSH terms, which should greatly improve retrieval accuracy in that database. INTERNET search tools such as Cliniweb and Medical World Search are now employing UMLS thesaurus terms to improve retrieval. The searchers' investment of time in learning how to use tools such as MeSH and the UMLS Metathesaurus should be amply repaid as other databases begin to use these aids for more relevant and meaningful retrieval.(22)

To be effective searchers, students must "translate" their information needs to match the indexing of the information resource. There are over a dozen WWW sites that offer access to MEDLINE, so the student must adapt his searching skills to the myriad of user interfaces and indexing tools currently in use.

Some questions remain: how much time is needed within the medical curriculum to impart information retrieval and management skills to students? What skills do they need to demonstrate the competencies necessary for the 21st century? How will the teaching responsibilities be divided between academic health librarians and medical informaticians? Librarians and medical informaticians need to discuss these and other issues.

VIII. Information Retrieval Curricula at Dalhousie

At Dalhousie, medical informatics is integrated into the undergraduate Case-Oriented Problem-Stimulated (COPS) Curriculum. The Medical Informatics unit is actively developing postgraduate

curricula in hospital settings and in continuing medical education throughout the Maritimes. Typically, the key component is to ensure that students have the skills to search the medical literature.

Clinical faculty at Dalhousie author cases, design the assignments and provide stimulus to learn how to use Cochrane Library, Internet and MEDLINE resources. In addition, the health science librarians provide one-to-one and group teaching sessions of:

- MEDLINE, Cochrane Library, other Health Reference Databases,
- Internet and the WWW as well as Dalhousie's Online Catalog.

Librarians also review searches for students and those done for their elective projects. Medical informatics personnel coordinate this type of activity and assist other faculty who provide medical informatics content in their teaching.

Incoming classes surveyed from 1992 to 1996 show a fairly computer literate group. At the end of the 1993-94 academic year, 94 per cent of those surveyed in Year I and 86 per cent of those surveyed in Year II said that computers were either moderately important or essential to medical education.(23) Specific activities for students learning and practicing information retrieval skills include a computer laboratory that provides 24-hour online searching access to the biomedical databases.

IX. Medical Informatics and Information Science Research

Research into medical informatics is ongoing. In December 1995, the Journal of the American Society for Information Science (JASIS) used medical informatics as its theme. Six journals are devoted to medical informatics and recognized by the Yearbook in Medical Informatics:

- 1) Journal of the America Medical Informatics Association;
- 2) Computer Methods and Programs in Biomedicine;
- 3) Computers and Biomedical Research;
- 4) International Journal of Biomedical Computing;
- 5) Medical Informatics and
- 6) Methods of Information in Medicine.

Canada has a developing medical informatics research community. The Health Evidence Application and Linkage Network (HEALNet) is a National Centre of Excellence with six theme areas. This initiative is set up to help clinicians "prove what they do" by making a connection between the clinical decision-making process and the world of evidence-based information.

In their recent report, the National Forum on Health used evidence-based decision making as a central theme. The

NFH working group's activities are aimed at the following outcomes:

- 1) to develop a culture of evidence-based decision making (EBDM); 2) to identify tools for determining where a lack of EBDM exists within healthcare, and

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- 3) to develop an infrastructure to promote EBDM, including providing access to databases and user-friendly consumer information sources.(24)

X. Conclusion

Decision-making related to patient care is only as good as the information the clinician has available. Therefore, it is critical that

the current generation of medical students develop efficient and effective information-retrieval skills. Future clinicians need to learn how to find clinically-relevant material without intruding on the clinical process. ■

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Internet and Intranets : Trends in Hospital Information Management

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Introduction

In hospitals and health service centers around the world the Internet and intranets are becoming an integral part of information management plans. As with any new technology under consideration for an organization, the appropriateness, benefits, risks and costs must be investigated and then presented to others.

The purpose of this paper is to:

- 1) illustrate some of the potential administrative, clinical and financial advantages of Internet and/or intranet connectivity,
- 2) address some of the primary concerns about Internet and intranet technologies and management, and
- 3) provide guidelines for assessing the appropriateness of these systems' use in a health care organization.

How Do the Internet and Intranets Differ?

The Internet is a worldwide connection of computer networks, whereas an intranet is a private network used by an organization. The primary difference between Internet and intranets lies in who has access to the networks. Access to an organization's intranet is usually restricted to internal users only.

The Internet and intranets "look alike" because both use the same protocols and technologies, such as the World Wide Web (Web) and Hypertext Mark-up Language (HTML). The Web interface has proven to be so easy to use and to integrate with other applications that organizations are now setting up Web servers, usually separate from their Internet Web servers, to organize and distribute internal, company-specific information. Much new software is available which minimizes the need for HTML expertise, allowing the Web creators to focus on design and organization.(1)

In recent years, the market for intranet products and services has grown faster than the market for Internet services.(2)

Projections based on trends from the beginning of 1995 predict that, "the Intranet market, based on revenue, will exceed the Internet market by a ratio of two to one through 1999."(3) For

more information about the design and function of intranets, visit the following websites on the Internet:

- **The Intranet Journal (sm)** at <http://www.intranetjournal.com/>
- **The Complete Intranet Resource** at <http://www.intrack.com/intranet/>
- **Building a Corporate Internet** at http://webcom.com/word-mark/sem_1.html/
- **Intranet Resources Center** at <http://www.infoweb.com.au/intralink.htm/>

Justifications for Using Internet and Intranets

Internet and intranets provide significant opportunities for re-designing information management practices. As a result, appropriate and effective use of the Internet and intranet may provide your organization with a number of administrative, clinical, and financial advantages. An extensive, but not exhaustive, list of potential advantages follows.

Potential Administrative Benefits

Internet

- The Internet provides opportunities to promote the organization to the public via the organization's own Web site.
- A hospital website can provide helpful information for patients before and after their visit to the hospital, including maps, pre-admission information, general information about hospital services, and patient education information.
- Online communication with vendors using the Internet allows organizations to take advantage of their value-added services, such as news postings about the company, searchable databases of inventory and online ordering.
- Internet provides increased access to external resources to support administrative planning and decision making. For example, staff may have electronic links to the announcements,

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policies, standards and personnel at regulatory agencies, funding agencies and health service partner agencies.

Intranet

- Organizations with intranets can store and update information electronically on a Web server. The information is therefore centrally located and easily updated as required.
- In a time of health service restructuring, Intranets can become an important tool to help employees distribute internal information regardless of their geographic location.
- Web technologies provide the ability to create value-added documents with multimedia images and hypertext links for staff and patient information and education. Practical examples include policy and procedure manuals, standards, employee notices, forms, staff directories and teaching modules. This enables organizations to deliver timely, consistent information to employees without expensive printing and distribution charges.
- Interactive communications can be facilitated. Examples include surveys and feedback, program notification and enrolment, progress queries and responses, memo distribution with comment and reply, room bookings, and data collection.
- Organizational bulletin boards can be set up as a means of disseminating information to staff and reducing paper for memos and notices.

Both Internet and intranet

- Electronic communications enable people to work in "Virtual Teams," regardless of distance. Committee members can establish agendas and conduct meetings via e-mail.
- Internet and intranet can be used effectively to communicate job postings and job search announcements internally, regionally, nationally and internationally.
- Organizations can post answers and related resource sites for Frequently Asked Questions (FAQs) for internal and external customers. This may help to reduce the number of questions that are received by staff, and can help ensure a consistent and thorough response to these questions.

Potential Clinical Benefits

Internet

- Internet provides electronic publications and discussion lists for every health care specialty. Such resources can be used to support continuing education and clinical decision making.
- As the Evidence-based Medicine philosophy continues to grow, health care professionals require access to all types of information resources, including those on the Internet, to evaluate clinical and research relevance. This is especially important as the Internet becomes an adjunct source of clinical information to the more traditional print forms.
- Internet can provide information about, and sometimes access to, specialists who might be able to help answer questions or solve problems.

- Internet use extends the benefits of professional conferences by linking people for further communication and collaboration.
- The Internet can be used by health care professionals to create local, regional, and national registries and databases to track and share information about certain types of patients, diseases and technologies.
- The Internet can be used to send radiological reports and images to referring physicians or consulting radiologists regardless of

geographic location. This will be especially advantageous in rural communities.

Intranet

- Online information for patients may be presented by the health service provider at the bedside or at the point of care. PC hardware costs for this function can be minimized by using a laptop computer, or even a PC on a trolley that is rolled into an area as needed and connected to an intranet communication line in the room. Ex-

amples of information that might be presented to patients with cardiac problems are simplified diagrams to help explain the condition and video clips showing blood flow and heart function in a healthy and unhealthy heart.

- Patient records, laboratory reports, and radiological reports can be provided to health care workers in a secure environment. This will provide better and quicker access to the records for clinical decisions and also help reduce costs associated with information handling in paper form.

Both Internet and intranet

- Internet and intranet can be used by members of the health care team to provide increased access to clinical information for patients or clients. Such information might include instructions or explanations that have been prepared by the organization and are used frequently, or might include special information that is retrieved online as needed.
- Use of Internet resources helps members of the health care team stay up to date with the information to which many of their patients or clients have access. This is an important aspect of clinical practice in terms of real and perceived provider competence.
- Internet connectivity may be a valuable feature for attracting recently trained health care practitioners to your organization, especially because use of new information technology tools is a requisite part of training curricula today.
- Web-based technologies are becoming popular for presentation of information to colleagues for conferences, meetings and continuing medical education. Using this technology, authors can produce multimedia presentations using a variety of software that can enhance the information being presented.

Potential Financial Benefits

Internet

- Hardware, administration and training costs for extending intranet access to Internet are modest; the largest additional cost will likely be the firewall software.

Intranet

- Cost saving may be achieved through more efficient internal communications and operations.
- Cost savings may be achieved through decreased use of photocopying and printing resources for internal publications such as manuals, training materials, newsletters and memos.
- The common interface of the Web helps to reduce software training time and related costs.
- Most organizations will see relatively low start-up costs for intranet implementation because many of them already have the necessary computer hardware in place.

Internet and intranet

- Cost avoidance and cost reduction for health care providers may be achieved through the promotion of health information for patients, and the prevention of readmission through enhanced patient education.
- Cost avoidance and cost reduction may be achieved through decreased duplication of effort, decreased travel time and more efficient communication and problem solving.
- The potential exists for income generation by organizations that use Internet to promote new services or advertise that new patients are being accepted at a new practice.

Primary Concerns about Internet and Intranet

In addition to considering the potential administrative, clinical and financial benefits of Internet and intranets, you should consider and investigate the primary areas of concern around these technologies.

Appropriate use

Employers are struggling with the question of how to provide access to the wealth of information available on the Internet, while at the same time ensuring that the technology is used to provide the right information to the right people at the right time.

Copyright

Employers will have a heightened responsibility to educate employees about the current and emerging copyright issues related to Web publishing.

Costs

The total costs of effective deployment in an organization, including the technical, labor and maintenance costs must be carefully considered.

Management

A multi-disciplinary team of information specialists should be in place to look after policies, procedures, systems and problems with organizational intranet and Internet.

Potential overload of networks

The management of intranet and Internet capacity and speed is of concern to network administrators. Intranets are locally controlled, so network speed can be managed. No individual or company controls the Internet, and its use is skyrocketing, so demands on the network are more difficult to determine and predict.

Quality and authenticity of information

The Internet provides a new and unconventional publishing environment. Frequent editing of documents can make it difficult to determine which version of a document should be considered the authoritative version. "Paperless publishing" allows a writer to bypass both paper and publisher, making it difficult for readers to discriminate between the writing of an expert and the writing of a hobbyist or someone who has falsified their credentials.

Quantity of information

Internet users can be confused, overwhelmed and distracted by the quantity of information that is available on the Internet and that is potentially available on intranets.

Security

Intranets should operate on a secure network, separate from but linked to the Internet, on which confidential information can travel. You have legal, moral and professional responsibilities to the organization, your peers and your patients to ensure security and internal control.

Criteria for Assessing the Appropriateness of Internet and/or Intranet for Your Organization

The introduction of new technologies and work practices in an organization should support that organization's objectives, mission, vision and values. Whether or not a health service organization pursues intranet or Internet connectivity, and the rate at which that organization proceeds with assessment and implementation, will vary tremendously among organizations.

Regardless of your organization's leanings toward or away from using Internet technologies, an assessment should be done. This is especially true for those organizations which are required to meet the accreditation standards of the Canadian Council for Health Services Accreditation (CCHSA). The CCHSA requires an information management strategy which demonstrates that the organization has given thoughtful consideration to the information needs of staff, patients and service agency partners.(4)

Seven assessment criteria appear repeatedly in the Canadian Council for Health Services Accreditation standards for acute care facilities: acceptability, accessibility, appropriateness, competence, effectiveness, efficiency and safety.(5) They offer a useful framework for assessing information technology, including Internet and intranet, in any health care setting.

Acceptability

Does the information service offered meet the expectations of the patient, family, providers and funding agencies?

Accessibility

Is this information provided to the right people, in the right place, at the right time?

Appropriateness

Does the new technology provide the necessary information for a necessary service?

Through the intranet, online information for patients may be presented by the health service provider at the bedside or at the point of care.

Competence

Is the information service provided and used in a knowledgeable manner that supports the achievement of safe, appropriate, acceptable, efficient outcomes?

Effectiveness

Does the implementation of the new technology result in measurable increases in the desired outcomes?

Efficiency

Does the information service support the provision of accessible, appropriate and safe outcomes in a cost effective manner?

Safety

Are potential information-related risks avoided or minimized?
Have you ensured the necessary security?

Conclusion

Those investigating Internet and intranet should be neither persuaded nor dissuaded by 'Internet hyperbole'. The potential benefits and costs to health service providers and health care recipients are enough to warrant a careful investigation of Internet use as it applies to the objectives of each organization. Good luck with your efforts to most appropriately meet the information needs of your staff and patients. ■

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Partners in Health : The Saskatoon Free-Net and Local Health Information Providers

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Introduction

The Saskatoon Free-Net (SFN) - like many community networks - has taken an active role in disseminating electronic consumer health information. The history of free-nets or community networks is linked to the delivery of electronic community health information. The first free-net grew out of Tom Grundner's medical bulletin board system (BBS) in Cleveland, Ohio in the mid-1980s. It was called Silicon's Hospital and was designed to help consumers connect with health care professionals.

Community networks can be a vehicle for fostering the development of local consumer health information that reflects community needs. They play an important role in:

- 1) the promotion of information literacy, and
- 2) empowering health information-providers and users alike in the use of information in an increasingly digital age. (This is particularly important in an age when more information is being made available in electronic format, and people are expected to use this information to make informed decisions about health and wellness.)

Community networks are dedicated to providing the widest possible, low-cost access to digital information at the community level, helping to close the gap between 'the information poor' and 'the information elite'.

Community Networks - How Are They Accessed?

There are a number of ways to connect to a free-net. Users who own or have access to a personal computer can use a modem to connect to a multi-user computer system at a central location. They may also be able to use telnet or a Web browser to connect to a free-net.

The free-net's computer, accessible from a computer at home, office, community centre or school, gives users access to services and information. These services can range from electronic mail to interactive chat areas to online coursework and downloadable files. Information can come from a variety of community groups and organizations on subjects ranging from arts and culture to science and technology to health and wellness.

How Do Community Networks Differ from Commercial Services?

The major differences between community networks and commercial Internet services are threefold:

- 1) access to information is at no or very low cost to users;
- 2) community networks are managed by volunteer community boards and
- 3) are not-for-profit agencies.

To achieve free or low-cost access for all members of the community, partnerships with public libraries are critical in order to house public access computers. Information-providers of all types are able to reach individuals and groups who may otherwise not have access due to financial barriers, lack of equipment or technical expertise.

Community networks also have active volunteer boards and involve many community agencies, users and members. As such, they provide a valuable

service by "representing local culture, local relevance, local pride and a strong sense of community ownership." (1) By complementing and augmenting traditional community networks, they help bring together various organizations, interest groups, businesses and community leaders as well as people in the global Internet community.

Emerging as a virtual town hall of cyberspace, community networks encourage debate and discussion about health care issues. They provide local context in a fast-paced and rapidly changing world. exchange of information.

The New Virtual Community

New 'virtual' communities make it possible for people to communicate and share knowledge in order to solve problems and reach goals. "Most social challenges...will be best mastered at the local community level. That is where individuals see and feel the true nature of the problem, where they have the confidence of their neighbours, where they can feel personally involved and where they can grasp workable solutions to immediate challenges."(2)

Emerging as the virtual town hall, the community network is the ideal means to foster debate and discussion about issues such as health care. It provides local context in a fast-paced and rapidly changing Internet world. By being linked to the global network, community networks also provide linkages to other communities worldwide for the further exchange of information.

For the community network to be able to provide consumer health information, locally relevant health information-providers are key. They need to be producing and offering valuable content of interest to users.

Saskatoon Free-Net (SFN) Health and Wellness Area

How did SFN evolve?

The SFN's Health and Wellness is a partnership between the local free-net and health information-providers in the region. SFN began operating in April 1995 (see Figure 1), and serves a rural and urban area with a population of roughly 250,000 citizens.

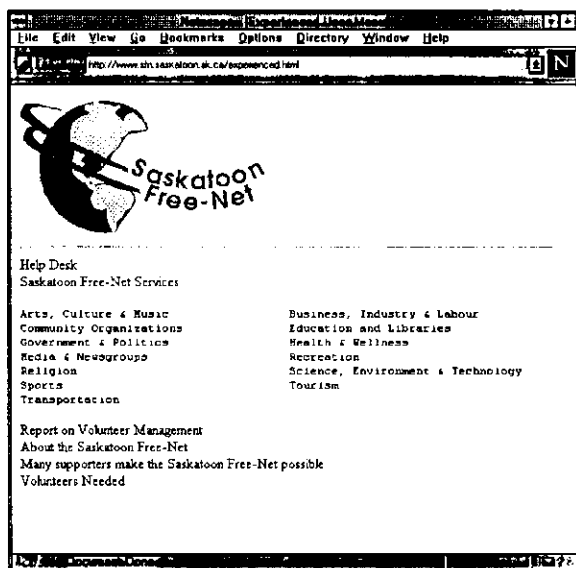


Figure 1

Initial SFN presentations about the service attracted 20 providers, four from the area of health. After one year, SFN had over 90 participants, with 12 percent of them in the health area.

In March 1997, two years into its operation, SFN has twenty-two health information-providers out of a total of two hundred and twenty information-providers. (see Figure 2)

Is SFN well-used?

The rate of adoption and use of these information technologies has been slower for health agencies. In contrast, users are eager to access the information currently available. The Health and Wellness area ranks second in usage out of thirteen broad groupings on the SFN. Consumer health is among the most valuable that a community network can offer, yet seems to be one of the most difficult to foster development.

There was an initial strong showing of health agencies interested in participating in SFN. Since then, the lower growth rate can be attributed to three main issues affecting the health care sector:

- 1) downsizing and cutbacks to health care agencies
- 2) a need for greater health information literacy efforts and
- 3) special concerns in the healthcare community regarding the accuracy and currency of digital health information.

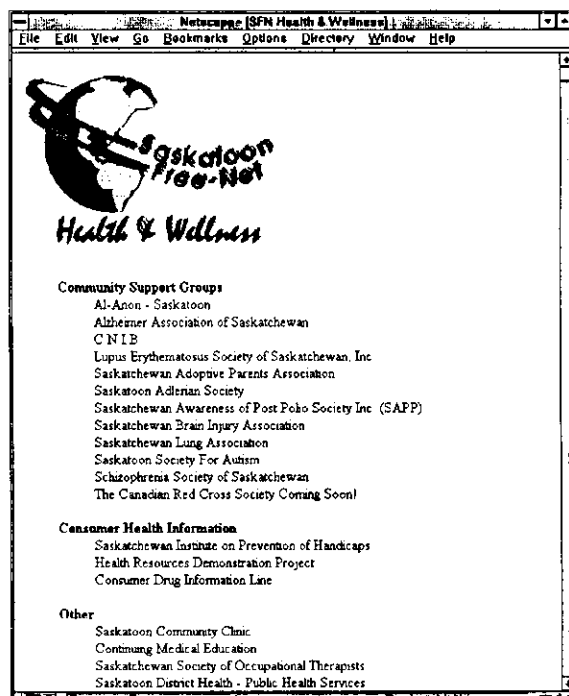


Figure 2

Among the SFN health information-providers are disease-specific groups, support groups, groups involved in research and health promotion and health professionals. The types of information they have available on their home pages includes contact information and description of services, newsletters, fact sheets, upcoming events and selective lists of Internet resources.

How is information updated?

The Alzheimer Association of Saskatchewan (AAS) is the longest active information provider on the SFN and regularly updates its own information. (see Figure 3)

AAS is responsive to local concerns and issues. AAS responded to the local debate over aluminum levels in drinking water and its association with the disease. Relevant messages for newsgroups and other information were posted in a timely fashion. The AAS

site provides information, fact sheets and lists of books and videos available in their library. The AAS provides a second computer for seniors in a high-rise residence, which contains facilities for day time care of Alzheimer's patients.

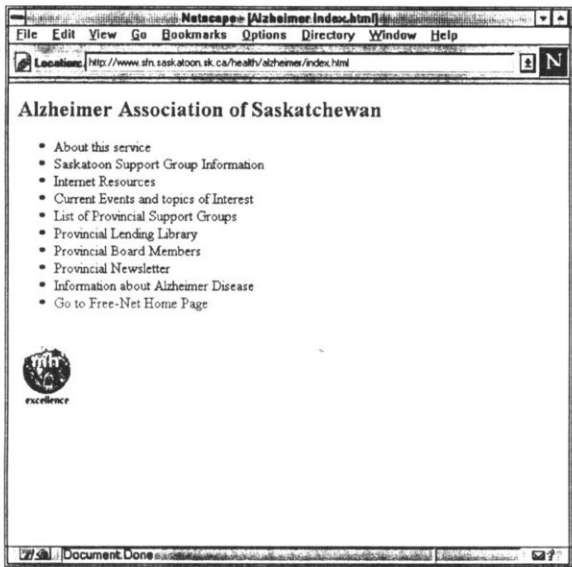


Figure 3

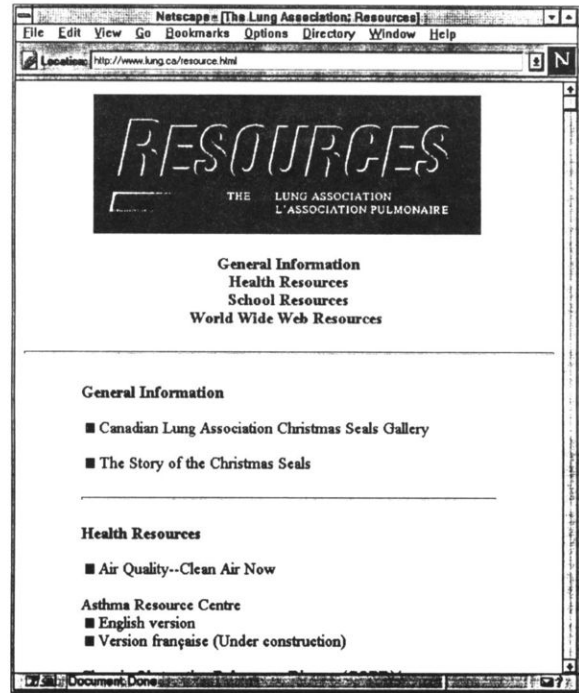


Figure 4

Many other health information-providers have a more static presence - online brochures and fact sheets. Since its establish-

ment, SFN has found that many new health agencies have developed Web-sites on other Internet servers. While some new providers put their information on SFN's server, others simply request a link to their site from the SFN Health and Wellness area.

Many of the new sites include more extensive information in multimedia formats and include specialized services. The Saskatchewan Lung Association, for example, provides information about Asthma, COPD, and lung diseases. (see Figure 4) They have developed an interactive resource area for schools, full of learning opportunities that includes games, exercises and quizzes. (see Figure 5)

Extending SFN access to marginalized groups

In 1996, SFN began a pilot project to encourage social justice groups and agencies to join since these groups address needs related to poverty, health and wellness, and hunger. At the local level, these groups have been marginalized from the 'information highway'. SFN requested and received funding from Industry Canada to conduct training of staff and volunteers and to build an awareness of community networks in these agencies.

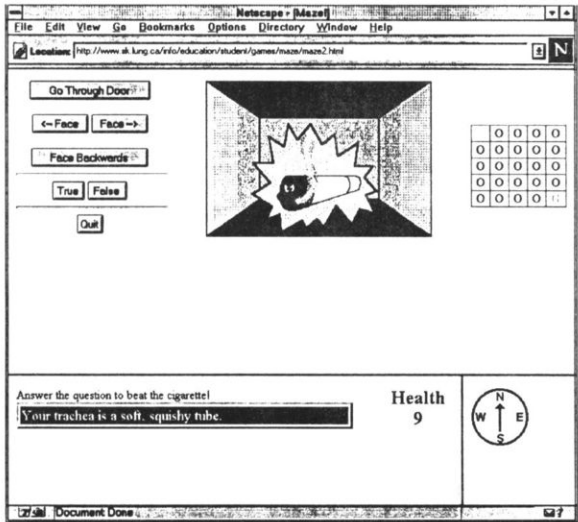


Figure 5

The Saskatoon Food Bank enthusiastically participated in the pilot. They received a public access terminal (PAT), and staff and volunteers were trained on how to use the Internet/free-net. Several other agencies received basic training on how to be information-providers, with the result that a number of self-help groups started to use SFN to provide more information about their services.

SFN provides services that foster greater use of Internet's interactivity: for example, online discussion, support groups, surveys, polls, feedback forms and other interaction. There is interest in providing more of these 'interactive' services, but most organizations are still learning how to use the basic technology. The time required to offer these interactive services is often a barrier to their implementation.

How Can Other Groups Get Started?

Gather information

In order to provide health information resources of local relevance, SFN believed that a comprehensive directory and critical mass of information was required. SFN's founding member - the Saskatoon Public Library (SPL) - began to document a rise in demand for consumer health information. A critical mass of information was deemed necessary to ensure that users would not get a null result to their inquiry. For ease of use, consistency in presentation, design and access was essential. We needed to build a context, a sense of community space on the information highway.

Partnerships

From its early days, SFN recognized the need to develop strong partnerships in order to deliver community-focused health information. Initially, SFN created a partnership with Saskatoon Public Library and the Saskatchewan Health Libraries Association. This made it possible to address growing demands for consumer health information and the need to access up-to-date, readily-available and consumer-friendly sources. Preliminary plans for consumer health information were presented to the Saskatoon District Health Board, requesting them to participate as a full SFN partner. No one agency had the resources and the skills to undertake the project alone, but a planned initiative of cooperation could be undertaken.

SFN partners knew that organization of the Health and Wellness information was critical. Electronically-housed, managed by professional librarians, SFN made it possible to provide a link for health consumers. Currency and accuracy were essential if SFN were to be reliable and useful; control, ownership and responsibility of the information would be placed at the agency level. This type of resource enhanced and expanded SFN's modest start.

SFN's Vision for Health and Wellness

The following vision for the project was developed:

- To develop a consumer-driven health information resource to complement a 'whole health' approach to wellness and help individual and families identify and manage their personal health needs.
- To provide information about people - doctors, nurses and other health-care professionals, as well as self-help support groups, community - health, government and community service agencies and organizations resources - libraries and special collections (books, videos, tapes, pamphlets).
- To facilitate personal communication and encourage feedback within an interactive environment through the use of electronic

mail (e-mail), online discussion groups and support groups and surveys.

- To utilize existing facilities and resources to disseminate locally-produced health information in a uniquely personal environment (Saskatoon Free-Net Association, 1995)

SFN's Four Major Partners

Each of SFN's four partners had a major role to play:

- 1) With the Saskatoon Public Library, universal access to information resources for our community was seen as a major vehicle for delivery.
- 2) SFN had the expertise in networking and infrastructure to support the project.
- 3) The Saskatchewan Health Librarians Association provided expertise in selecting and organizing consumer health information and ensured an easy to use and robust resource.
- 4) The Saskatoon District Health Board acted as the umbrella organization for

civic health and coordinated the project when agencies provided information.

SPL provided much-improved access to health information thorough electronic access to a full-text database of 100 health journals, a subscription sponsored by SPL itself. Local and remote resources were seen as essential to meet growing demands for timely, relevant, up-to-date information for urban as well as rural residents. The partners sought startup funding for the six month pilot, but requests were denied. However, SFN was recently granted charitable status and this may open some doors for further funding.

Conclusion

SFN is just beginning to develop a comprehensive local health information resource. The partners of SFN's Health and Wellness Area are still learning how to improve health information services and health care at a community level. Telemedicine and telecare initiatives undertaken at other community networks in Canada suggest that we need to further tap the potential of community and health agency partnerships available.

Nechako Community Network in northern B.C., for example, links residents to health care professionals for pre- and post-care. They provide virtual tours of the local hospital with information on everything from surgery where elevators are located. Supported by a regional health board, this project is trying

to reduce re-admittance of patients to the hospital after operations. Their hope is to reduce significant human, social and materials costs.

Since 1995, the SFN project has continued to grow and develop. At first, SFN was initially involved in promotion and raising

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awareness. Training and hosting the health information sites involved in the project was the next priority. Along with these activities, SFN began to provide an index of local electronic Health & Wellness sites.

Community networks and health information-providers face a

number of challenges in trying to provide a locally relevant, comprehensive, timely consumer health information resource in the emerging electronic age. Working together and forging strong partnerships can provide the necessary framework to meet the challenge. ■

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Web Sites

1. **Saskatoon Free-Net Association** <http://www.sfn.saskatoon.sk.ca>
2. **SFN Health & Wellness** <http://www.sfn.saskatoon.sk.ca/health/>
3. **Saskatchewan Lung Association School Area** <http://www.sfn.saskatoon.sk.ca/school/>

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Internet Discussion Lists in Substance Abuse : Impact on Consumer Health, Recovery and Support

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Introduction

The technology of the Internet has greatly improved the flow of and access to consumer health information. One Internet application proving to be useful for consumers as well as health professionals is the discussion list, or listserv. Listservs and discussion lists are both easy to use and readily available through a simple e-mail account. Many Internet discussion lists and listservs are available on a variety of topics, but this paper's focus is on those in the substance abuse field.

As a frequent subscriber to discussion lists - as well as a reviewer for *A guide to addictions information on the Internet and other public information sites* (1996) (1) - it seems obvious that a real benefit can be derived from sharing information using online technology. In addition to facilitating self-help activity for patients, online lists play an important additional role. They encourage different types of participation and topics of discussion. Also, the specific purpose of each list can often lead to unique outcomes in recovery. Although focused on the substance abuse field, this report also serves as a study in the variety and utility of discussion lists in the health field as a whole.

The Nature of Substance Abuse Related Problems

Substance abuse related problems are unique and complex - they require information and support throughout the recovery process to be understood by patients and family members:

1. The role of self-help

The addictions field has a long tradition of mutual support. The first support groups were organized around abstinence from alcohol in the 1840s. The modern tradition starts with the founding of *Alcoholics Anonymous* (AA) in 1935, which continues to have a significant presence in North America.

Room and Greenfield report that 9 per cent of the US adult population has attended an AA meeting (2). AA is also popular in Canada, and AA members were active in lobbying to develop alcoholism treatment services during the 1940s and 1950s (3). Many twelve-step programs modelled on AA have emerged such as *Al-Anon* for family members of alcoholics. For those with drug problems, groups such as *Nicotine Anonymous* and *Narcotics Anonymous* offer assistance.

Alternatives to AA for alcohol problems include such groups as Women for Sobriety and the Secular Organization for Sobriety (SOS). Twelve-step groups are organized under lay leadership, but some alternatives like *Moderation Management* and *Smart Recovery* operate with a professional or lay moderator.

Substance abuse seems to lend itself to lay-organized groups, though many groups involve trained professionals in varying roles. In a 1994 California study, it was found that of the 426 self-help and mutual aid groups surveyed over 80 per cent had professionals involved (4). Obviously, several options are available to health consumers who seek assistance for recovery from addictive behaviours.

2. The complex nature of substance abuse

Healing from an addiction requires active participation by health consumers and their family members. This participation often results in an increase in information-seeking behaviour. In fact, natural recovery from an addiction (5) or recovery with brief intervention by a health professional (6) is not uncommon. Information has a definite role to play here.

Alcohol and other drug abuse can result in complex and serious health and psychological consequences. Recovery can be a long term problem (7) with occasional relapses. These interruptions in recovery mean that the patient may experience difficulties long after treatment is over. Former addicts are beset with problems: Hepatitis C or neurological problems; some find they still struggle with issues that led to their addictive behaviours such as chronic pain or childhood trauma.

In related areas such as fetal alcohol syndrome/effects (FAS/E), health consumers are burdened with primary and secondary disabilities not well understood or documented by mainstream providers in health, education, social services and the criminal justice system (8).

3. Substance Abuse Field Fuels Research

The substance abuse field poses many questions and problems for researchers - which fuels a very active research base in the field. However, there is a lack of literature that bridges research knowledge with clinical information for health consumers. A similar lack of information affects the health practitioner's ability to treat patients.

The free flow of informal discussion on listservs and e-mail lists is a supplementary source of information in the substance abuse field. Some of the different categories of lists are given below.

Categories of Discussion Lists For Support

In the following, discussion lists are placed into four categories based on who contributes to the list or reads messages - known as the "participant mix". Below, each of four categories is assigned a descriptive code:

- I. C&C: Consumer Mutual Support**
Participants of C&C are health consumers only.
- II. C&P: Consumer Mutual Support with Professional Moderator**
C&P lists are moderated by a professional addictions counsellor or psychosocial professional, with other professional members, and read by health consumers
- III. P&P: Professional Development and Networking**
P&P lists focus on professional networking and professional development. Many are closed, moderated lists of professionals only. Some P&P lists allow health consumers to participate.
- IV. I&C&P: Information and Mutual Support**
I&C&P lists are moderated by an information professional with consumer health participants seeking mutual support and information. Professional participants also seek information.

Benefits of Online Support for patients/families

The benefits of discussion lists for patients and family members are that:

- ♦ access is provided to large participant networks that extend beyond the local community;
- ♦ lists are convenient to use in privacy at home, 24 hours a day;
- ♦ lists are an ongoing source of support (not limited, for example, to post-treatment follow-up);
- ♦ consumer anonymity is possible if the participant desires.

These benefits may enhance what happens in therapeutic, non-electronic settings and provide additional sources of networking previously unavailable.

Here are some of the broader, potential benefits of new communication linkages to the larger community:

1. Providing assistance to health consumers on three levels:
 - a) emotional mutual support;
 - b) access to professional coaching or opinion (directly or indirectly);
 - c) information and resources.
2. Promoting a synthesis of new clinical knowledge as a result of professional discussion involving information, experience, judgement and intuition.
3. Indication of health consumer-driven enhancement of knowledge in the field.
4. Evidence of enhanced or new communication links among participant groups.

An Examination of Some Select Discussion Lists

For the purposes of this paper, several online discussion lists within each broad category were examined. Representative examples were compiled for each category so that anecdotal and other evidence typical of the category could be gathered.

From the perspective of a health librarian within the substance abuse field, observations were made based on the content of discussion threads, information presented in introductory messages, moderator messages and other features such as volume and response time of messages.

Results suggest that online discussion has four main advantages over and above traditional forms of networking:

1. Fluidity of online discussion

Discussion often extends beyond local communities, whether a community is defined by geography or membership. *ADD-MED*, for example, is for members of the American Society of Addiction Medicine, but membership goes beyond the organization. Most of these fluid electronic communities span North America and beyond, but discussion on the C&C lists will take on local relevance, if the need arises.

2. Convenience of use

Online networking seems to be both convenient and timely. The number of messages exceed ten per day. Most messages were found to routinely evoke many responses within 24 hours, and frequently faster. It was touching to experience incidents of immediate emotional support, whether times were good or bad.

3. Ongoing, current use

The lists showed every indication of being ongoing and current. People join, lurk, participate and drop out at their convenience and as need arises.

4. Non-threatening and non-judgemental environment

Many online members gave their full names. The nature of many discussions among health consumers reveal a complete "tell it all" philosophy indicating a non-threatening and non-judgemental atmosphere.

Four Discussion List Categories

Here are the observations made of the four discussion list categories, each list's main features and advantages:

I. C&C - Consumer Mutual Support

Most lists observed within this category were smoking cessation groups - in this case ex-smokers - so these conclusions may not be typical, but should provide a starting point for discussion.

Representative example: *EXSMKR-L (Ex-smokers)*

Observations: List tends to be highly social, offering a lot of emotional support, but not a lot of exchange of health information.

Main features: Peer emotional support.

Main advantage: Enhanced mutual emotional support for health consumers.

II. C&P - Consumer Support with Moderator

Like many self-help groups, *Moderation Management* had a professional moderator and other professional members participating and lurking.

Representative example: *MM (Moderation Management)*

Observations: C&P lists offer professional coaching and encouragement, information and advice, as well as peer support. Lists, in some cases, are run by existing self-help organizations. *Moderation Management* is an organization that had a physical network of meeting sites before making a cyberspace presence. Joining the list provides a lot of information about the organization, its program goals as well as access to reading lists. MM assists those who have

a drinking problem and want to cut back rather than abstain, although the program recommends an initial 30-day period of abstinence.

Main features: Emotional support from both peers and professionals. Information, including resource lists, and advice from professionals.

Main advantage: Enhanced mutual, emotional and information support and professional guidance; enhanced consumer-professional communication links.

III. P&P - Professional Development and Networking

Some of these lists, such as *ADDICT-L* allow non professionals; most are moderated, although often loosely. The example provided is a closed list for professionals only, meaning permission to join must be granted by the moderator.

Representative Example: *ADD-MED* (*Addiction Medicine*)

Observations: P&P lists are information-rich, with messages about up-and-coming meetings, new web sites, publications and research news. What is the impact on consumer health? Members routinely bring clinical problems to the list for peer discussion. Consumers throughout the online community can benefit from this list because professionals and consumers alike update their knowledge here. *MM* professionals tap into a large peer group for advice and direction with a speed unknown before e-mail.

Main Features: Professionals, including information professionals, bring consumer questions to a broad audience of professionals. An ongoing forum is available for synthesis of information based on professional knowledge, experience and opinion.

Main Advantage: Enhanced information access for professionals which benefits the health consumer; greater knowledge synthesis, indirectly benefitting consumers; forum for advocacy by professionals related to improved health care protocols and services; enhanced indirect link between the professional and health consumer.

IV. I&C&P - Information and Mutual Support

These information and support lists are rare. However, they illustrate the important roles of information specialists in linking health consumers and professionals and in serving the information needs of both of those groups.

Representative Example: *FASLINK* (*Fetal Alcohol Syndrome*) Set up and moderated by a librarian at the FAS/E Information Centre, Canadian Centre on Substance Abuse, Ottawa, Canada. Subscribers are parents of children with alcohol-related birth defects, information professionals and others, including researchers.

Observations: Moderator provides information on a regular basis about new resources, up and coming conferences and news in the field. Moderator is available to field questions. This list pulls together a geographically-dispersed group with little community support. Some information presented by parents and other caregivers, such as behaviours and health concerns, is undocumented in the literature.

Main Features: Planned, organized information dissemination by the information specialist moderator. Information-rich in terms of highlighting and documenting the problems experienced by those with FAS/E. Information specialist acts as an intermediary

by providing the means to link professionals and health consumers. Moderator can also recruit professionals.

Main Advantage: Enhanced emotional and information support for the health consumer; potential to create consumer-oriented information products such as directories and for bringing together a research population difficult to recruit; new communication links forged among groups that have not traditionally existed - a link between consumer and researcher with an information specialist as intermediary, or not.

Trends in Online Discussion

Electronic networking enhances communication. In lists such as *Moderation Management*, we see a vast mutual aid network emerging with professional involvement. In addition to traditional routes, Internet facilitates the growth of different kinds of networking. This is true whether the communication is among peers, or between information and other professionals and researchers. The results clearly show the unique value each category of discussion list in networking for online support and sharing of information.

Concerns and Limitations of Online Discussion:

1. Online access and literacy

Only those who access and use technology can link into this type of support, and computer literacy is required. Many health consumers are potentially excluded - often older persons, the socially disadvantaged or those who communicate in languages other than English. Undoubtedly, there are discussion lists in other languages that need to be explored.

2. Commitment of time

Time commitment is another limitation, especially for health and information professionals. Many professionals shy away from discussion lists with public membership, anticipating high message volume. Even with an excellent moderator, it is difficult to maintain a focus.

3. Netiquette

Netiquette must be continually reinforced. Even in professional-only lists subscribers go off topic and send personal messages. In mixed consumer/professional lists, where professionals may not be there to assist the consumer it is a challenge for the moderator to ensure balance. A shift to emotional peer support can take it outside its mandate.

4. Liability issues

Professionals are concerned about liability issues in providing advice or health information to unknown members of the public. List owners should provide a waiver in an introductory message stating the purpose of a given list, and that medical advice is not given. Finally, discussion list users must know that messages posted to a discussion list are the intellectual property of the writer and cannot be reproduced or quoted without permission.

What Role Can Information Specialists Play?

How can health librarians and informational specialists use discussion lists to support and assist health consumers? We can use

discussion lists and play a role in their development. By joining *Consumer and Mutual Support (C&C)* and *Consumer Support and Professional Moderator (C&P)* groups, we tap into a consumer network for hard to find information and assist those health consumers without access to technology.

Librarians must remember the issues around liability of providing information. If consumer health information is transmitted to a third party, permission must be granted.

In a *Professional Development and Networking (P&P)* group, we can assume our role of health professional, one which has traditionally been more limited. We can be proactive in providing more *Information and Mutual Support (I&C&P)* groups in health to open up routes of communication and to bring consumer needs to professionals.

Librarians can use their expertise in information technology and management to advise and facilitate storage and retrieval of discussion list content. Finally, we can use our knowledge and skills

in information provision to ensure professional integrity is maintained in discussion lists.

Conclusion

Current discussion list software will be replaced eventually by something newer, more interactive and more powerful. However, the phenomenon of fluid electronic communities on the Internet is likely to stay with us for the foreseeable future. Internet discussion list technology is a powerful information source in consumer health. There is ample evidence of that within the field of substance abuse and within other health care fields as well. This paper has only scratched the surface of consumer health-oriented lists and the information and assistance they provide.

Refer to *A guide to addictions information on the Internet and other public information sites* for subscription details and other information about the discussion lists described in this paper and many other addictions-related lists.

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Invisible Users and Virtual Access : Bibliographic Instruction to Remote Users at the University of Nevada School of Medicine

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Introduction

Today, libraries are seeing a major shift in their customer base. Walk-in clientele remain abundant, but in increasing numbers users are accessing information resources in the library without ever crossing the threshold or seeing a librarian. The University of Nevada School of Medicine supports a widely-distributed remote-user population. While the School's information needs are served by the Savitt Medical Library on the Reno campus, a substantial number of faculty and students are in clinical programs based in Las Vegas - some 400 miles across the State - and in outlying rural communities.

The geographic distribution of remote users presents a considerable challenge for Savitt library staff as we are the primary resource for instruction in all aspects of information retrieval, e-mail, computer databases and the Internet. The intent of this paper is to examine issues inherent in remote access, some of the methods of providing bibliographic instruction at a distance, as well as the tactics needed to successfully implement a remote education program.

Background - Savitt Medical Library

The Savitt Library provides network access to a number of databases: MEDLINE, CINAHL, PSYCHINFO, Health Reference Center among them - as well as Netscape-enabled access to the World Wide Web (WWW). Any library user, whether in the library or accessing remotely, faces the challenge of selecting appropriate information tools and mastering different search protocols.

Remote users must overcome several obstacles:

- connectivity problems;
- hardware and software incompatibilities;
- installation and configuration of client software;
- managing, reformatting and printing downloaded data and
- contend with other technical problems.

Like most libraries, we hold among our goals that of training users in information management skills. As our network has grown in scope and complexity, there has been an overwhelming impetus to develop instructional programs which are driven by user-demand. A steady rise in requests for help indicates an obvious need to develop an educational program serving remote users.

Delivery of off-campus library services is a topic of interest in the library literature. It focuses on the creation of satellite collections, inter-library loan and document delivery support, and the technical and economic considerations of local area networks.(1) Networking of databases is often regarded as the capstone to

remote service but discussion stops short of training the user.(2) Given the complexity of information networks, remote user training should be recognized as a fundamental aspect of library services.

Efforts are underway in a number of libraries to address the needs of remote users. Following the example of *Navigating the Internet : an interactive workshop* where Richard Smith used a listserv to achieve widespread distribution of seminars on Internet use, libraries are using listservs to extend bibliographic instruction opportunities.(3) At the University of Texas, Austin, a new software program allowing librarians to remotely attach to a library workstation and intervene in the search process is being investigated. In effect, this program would see librarians assume control of a users workstation so that effective use of a database could be demonstrated.(4) Videoconferencing technology is showing some initial promise in the distance learning arena .(5) The remainder of this paper will examine these and other methodologies and our experiences incorporating them into a user education program.

Statement of Problem

An inherent difficulty in supporting remote users, and one critical to the development of strategies, is to identify the target population. Within the physical confines of a library, it is readily apparent who is using information resources and who needs assistance. Quite the opposite is true of remote users who use library systems in isolation and are largely invisible to library staff.

Contact with remote users can be minimal for a number of reasons. Lacking familiarity with library staff, remote users are less able to pinpoint potential sources of instruction and assistance. Obtaining an information desk phone number may pose a considerable challenge. Moreover, remote users do not work within the limits of library hours and are likely to use resources when library staff is unavailable. One category of user referred to is the 'inept but satisfied'.(6) These users make poor use of search software and find little relevant information. Still, by not coming up totally empty-handed, they judge their efforts a success and are unlikely to seek help to improve their skills.

Initial Strategies

To strengthen our distance education program, it was necessary to enhance communication and increase our visibility with network users. The first crucial step was to travel the State and meet users face-to-face. We found that personal contact with users was enormously beneficial in establishing the credibility of staff and the value of their expertise.

After these initial site visits, subsequent electronic communications was clearly beneficial. Studies of e-mail as a means of providing reference service often cite a disappointing lack of user interest in remote reference service.(7) It seems library staff anonymity in an e-mail exchange may contribute to low participation in such a reference service. In other words, if users know you and have benefited from on-site training, they are more inclined to seek subsequent help from you via e-mail. In our experience, the number of e-mail contacts increases after an occasion to meet and build personal relationships.

Along with site visits, we employ an e-mail distribution list inclusive of all School of Medicine faculty and affiliates as a way of keeping a high profile across the state. Periodically, we release notices on:

- 1) new books and other acquisitions,
- 2) additions and enhancements to our Web-site and
- 3) tips on searching the various databases.

Sending notices en masse creates an ongoing awareness in the minds of our remote clientele that - even if located across the state - we are in touch and ready to provide assistance.

Methods

Instructions via e-mail are pointless to users who cannot log on to an e-mail account; materials on a Web-site are of no use to someone who cannot successfully install a Web browser. Remote users have an ability to use technology ranging from the very basic to the quite sophisticated. We were careful to avoid focusing on any particular technology and developed instead a spectrum of instructional strategies matched to user-needs and capabilities.

Our goal is to find solutions at all levels to overcome the handicap of geographic isolation. Here are the five methods used:

1. telephones,
2. fax machines,
3. e-mail,
4. World Wide Web (WWW) and
5. videoconferencing.

1. Telephones

The telephone remains an effective means of giving instruction to remote users. Herbert White has proposed that the ultimate educational program would be a 24-hour toll-free 800 number.(8) The Fairbanks Rasmuson Library at the University of Alaska maintains a 1-800 number in support of its distance education program.(9) The chief advantage of a 1-800 number is that of ensuring a common denominator for communications: even the most technologically-challenged can use a telephone. Given our staffing limitations, even moderate reliance on instructional support by telephone is not a desirable option.

2. Fax

FAX machines, now commonplace among remote-users, are a popular, low-tech extension of the telephone. We find them a useful tool for distributing library handouts and screen captures which clarify a learning issue more effectively than a verbal explanation. FAX is additionally an alternate channel through which users can contact us for help.

3. E-mail

E-mail support permits more efficient utilization of staff resources and opens up communication with a remote clientele. E-mail is widely available among our users and lets them contact us at their leisure. E-mail allows us to respond as time allows.

As noted, by promoting high-touch, personal outreach when possible, e-mail has evolved into a widely-used and productive instructional tool. We have chosen not to pursue dissemination of formal classes through a listserv mechanism. Students and faculty taking e-mail based courses have reported being overwhelmed by this information. If no immediate need is seen for remote users to apply a skill, its benefits quickly fade. We provided users with a readily accessible, well-organized collection of instructional materials which are utilized at point of need.

4. World Wide Web (WWW)

In keeping with an 'at point of need' philosophy, we took advantage of our library Web-site as a focal point for instructional resources. At the WWW home page level, a prominent icon was used to allow users an opportunity to indicate help was needed. Because remote users lack a local source of printed instructional materials - pathfinders and database guides, for example - we created a 'virtual handout rack'. Electronic versions of our printed guides allowed us to expand the availability of instructional materials, while relieving some of the burden of faxing or e-mailing materials to individual users.

The WWW substitutes bibliographic instruction in a lecture format by providing a virtual home for self-guided tutorials. For users lacking access to traditional classroom-based instruction, tutorials provide an opportunity to develop fundamental skills in network navigation, Internet, database selection and use and other research techniques. The help section features a library FAQ which reflects our real-world troubleshooting experiences.

We hope that this approach will resolve commonly occurring user problems and reduce the demand for individual instruction. Lastly, the WWW has a linked e-mail address so that users can send requests for help that way.

5. Videoconferencing

The University and Community College System of Nevada has implemented a state-wide videoconferencing network which the library has explored as an additional means of delivering remote instruction. The compressed video system runs on ordinary telephone lines and is displayed on large monitors in specially equipped classrooms. The classrooms are 'smart' in that they come equipped with teaching stations capable of transmitting slides, overheads, computer screens, video cameras, videotapes, laserdisks and live off the Internet. The heart of the system is CODEC, a device compressing and decompressing signals for transmission. Still pictures and audio are excellent; moving images are somewhat below broadcast video standards, but very acceptable.

There are aspects of the current system which limit its potential as a teaching vehicle. First, this generation of equipment does a poor job of transmitting images from a computer screen. Only very large type fonts, 24 point or more, are readily legible. The system lends itself well to presentation software. Second, live demonstra-

tions of databases - the mainstay of bibliographic instruction - is not feasible at this point. When the system migrates to next-generation videoconference technology we should find our capabilities enhanced.

Other limitations of videoconferencing include:

- a broadcast requires an assistant to operate equipment and to manage cameras and sound;
- an assistant is needed to switch between broadcast sources at correct times during a demonstration.
- on the remote end, time can be spent getting the equipment to run properly and can baffle a novice.
- perhaps the greatest deterrent is the competition for scheduling.

Classrooms used to broadcast are few in number and in high demand. Coordinating classroom availability with a remote site and medical faculty is sometimes an insuperable obstacle. However, we continue to explore videoconferencing with the expectation that advances in technology will create positive teaching opportunities.

Lessons Learned with Remote Users

Geographic separation need not put library clientele at a disadvantage when using information resources. Today, information technology gives library users an array of options when seeking help. These mechanisms must be widely publicized and supported if remote users are to take advantage of them.

In providing bibliographic instruction remotely, we find that helping users understand and manage their computers and software is often the biggest hurdle to effective use. This hurdle can also be the most challenging problem to solve from a distance. As computer users increase their proficiency, we expect to provide more instruction in the selection and use of information resources and less on getting a balky PC to make a successful PPP connection.

At the Savitt Medical Library, we focused initially on providing support to geographically-isolated users. Now, we appreciate the benefits to be derived in supporting all network users, even those departments situated down the hall. We find that clientele on campus are satisfied to have problems resolved via e-mail in much the same way as those colleagues in remote locations. The methods we have employed present inherent advantages over more traditional library practices. Guides and instructional materials in electronic formats can be kept up-to-date far more easily than their print equivalents.

Conclusion

Changes to medical education will have a long-term effect on bibliographic instruction. Many schools now require incoming students to purchase laptop computers. Computer-based learning is increasingly a part of the curriculum and evidence-based medicine has put increased emphasis on developing information-seeking and management skills of students. These developments have put a premium on computer literacy and have promoted increased access to networks and electronic resources.

The scope of educational programs in our library has widened to include areas such as telecommunications, hardware installation and software management unanticipated a generation ago. Medical librarians must be prepared to respond to this trend and to expand their knowledge base accordingly. More critically, librarians must prepare to promote themselves and their expertise - or they will see their teaching roles taken up by other professionals.

Libraries are becoming increasingly virtual and our users increasingly invisible. The demand for training is inevitable. Taking an innovative approach, librarians can meet the instructional challenges facing remote-users. The future of library instruction is rich with opportunity. As Emerson said:

"this time, like all times, is a very good one, if we but know what to do with it."

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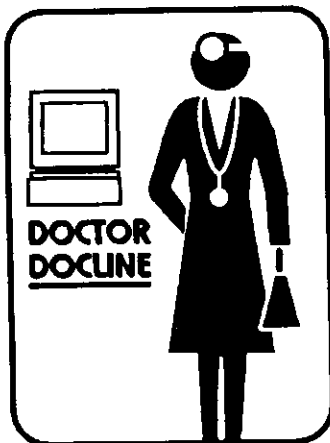
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Ask Doctor DOCLINE

Bev Brown



Questions to *Doctor DOCLINE* are fielded by the CISTI DOCLINE Coordinator to answer queries that no manual or help screens seem to address. Direct your questions to:

Beverly Brown
DOCLINE Coordinator
Tel: 1-800-668-1222
E-mail: cisti.docline@nrc.ca

Q. On the DOCLINE Application, should I fill in the Monograph/Audiovisual/Non-SERLINE Routing Table?

A. Yes, definitely. The recent DOCLINE enhancements will result in increased usage of this routing table, often referred to as the M/A/N table. In its broadest sense, the M/A/N table allows you to request any form of material in any subject area from a DOCLINE library.

Remember that DOCLINE requests will route on the SERLINE Routing Table if the document requested is from a serial title found in the SERLINE database. The corollary of this is that holdings can only be entered in SERHOLD if the journal title is found in SERLINE. Serial titles found in SERLINE are catalogued by NLM staff who assign a Journal Identification number - also known as a Title Control Number (TCN) - to each title.

All requests for titles not found in SERLINE route on the M/A/N table. In addition to monographs and AV materials, non-SERLINE citations may come from the MEDLARS databases AIDSLINE, SPACELINE, CANCERLIT, HealthSTAR and HealthSTAR75. Citations to papers from technical reports, conference proceedings, meeting abstracts, book chapters and bibliographies will route on the M/A/N table. When you enter one of these UIs in DOCLINE, the system responds: "This citation has no Journal Identification and will be entered as a Monograph".

You can identify up to four libraries in Cells A to D in the M/A/N table. The fifth library is NLM. Since there are no holdings in the M/A/N table for DOCLINE to check, your request will route to the first library in your cells. If this library cannot fill the request, the request routes to the second library, and so on. You can use the Routing Cell Start-Stop to limit the routing. If you answer A-D to the Start-Stop prompt, for example, your request will not route to NLM.

Libraries usually enter large resource libraries in their M/A/N tables since these collections are more likely to contain a wide range of material. However, if you want to send a request to a particular library or libraries, you can do so by using the OVERRIDE function. You can list up to four LIBIDS at this prompt. If you do not limit the routing and none of the libraries entered at the OVERRIDE prompt fills the request, the request will then route to NLM.

Cyberpulse

Rita Vine



Rita Vine is Marketing and Instruction Coordinator at the Gerstein Science Information Centre, University of Toronto. Copies of Cyberpulse columns are available at the Web-site:

<http://www.imr.on.ca/cyberpulse/cyberpulse.htm>

Comments and suggestions for future columns are welcome and should be directed to:

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Forget Link Lists : Think URL Databases

To assist users in identifying useful Internet resources, library webmasters are now selecting, evaluating, and organizing URLs into collections of 'link lists'.

Doing so is a natural extension of library service and cataloguing functions. Librarians know that the world-wide web can be a virtual flea market, with some gems for those who know where to look, as well as material that is rather useless.

Our natural inclination as librarians is to begin to select and acquire web resources in much the same way as we make selection decisions for books and journals. Why not create a 'virtual URL bookshelf' of important links that extend our collections and make them available to users?

A noble idea, but then the nasty bits came: URLs that moved or disappeared; Web-sites that didn't lend themselves to easy categorizations, where one section of a Web-site would fit best into one category, one section in another; 'on-the-fly' URLs with impossible addresses that are not reliably linked. Webmasters spent more time chasing errant URLs and trying to pigeonhole them into ill-fitting categories than actually making useful link lists.

Then, other problems (such as the human factor) surfaced. Librarians watched how users made search decisions based on information viewed on a Web page. Looking for quick visual cues, no one read the directions - or the librarian's annotations. Users didn't understand what we meant in the descriptions of different link categories. We discovered that the word 'directories' meant nothing to searchers who never attended library school. We learned that users preferred Yahoo and Altavista because in those search engines they found the ubiquitous search box - we watched them type entire sentences into the boxes without looking at 'search help' files. If they got 40,000 hits on the word 'medicine', so what? Immediate gratification was the goal and the surfing was moderately rewarding.

The convergence of Webmaster frustration and the realities of searching behaviour necessitates a different approach to creating

the 'virtual library'. Many Webmasters conclude that in order to support a critical mass of URLs, the time has come to abandon the 'link list' approach and begin to create databases of annotated, or even catalogued URLs - these can be both searchable by keyword or navigable by a hierarchical subject approach.

The benefits are obvious - you can create a URL link in one common database, not several different HTML pages. URLs will still move and change locations, but you only have to chase them down and revise the link once. If you have a web-searchable book catalogue, and if you can apply your book catalogue's subject headings to the URL database as well, there's no reason why some day the two catalogues can't be integrated - so for example, you could find records for both your print copy of the Merck Manual and Merck's net version using the same search.

As for user benefits, the database would be searchable in a form interface by keyword - not just keyword title, but keywords in librarian-created annotations and those in subject headings assigned by a librarian. Users would have a better chance of actually retrieving relevant files with an expanded range of word choices. We could also adopt pre-existing subject classification schemes like Library of Congress, Dewey, or National Library of Medicine MeSH rather than try to make up our own as we went along. These classification schemes could be presented as searchable alternatives for the user.

The challenge is in the doing. Databases cannot be created with a basic knowledge of hypertext markup language (HTML) - these back-end databases rely on gateway scripts, some knowledge of UNIX or other operating system, and 'on-the-fly' document creation to deliver results to users. A lone webmaster cannot do this alone, making up rules as a project grows. This kind of project requires cataloguing and selection guidelines and help from network staff to teach us how to create, install and serve up the databases.

Several projects to create cataloguing and database standards for WWW resources have regular Web-site updates and samples. OCLC Internet Cataloguing Project Colloquium papers are published at <http://www.oclc.org/oclc/man/colloq/toc.htm>

A few libraries are experimenting with classification schemes. For example, Cyberstacks project at:

<http://www.public.iastate.edu/~CYBERSTACKS/>

Cyberstack's creator, Gerry McKiernan of Iowa State University Library, also contributed a paper to the above OCLC Colloquium.

OCLC is sponsoring InterCat at <http://www.oclc.org/oclc/man/catproj/catcall.htm> - a coordinated effort among libraries and institutions of higher education to create, implement, test and evaluate a searchable database of USMARC format bibliographic records, complete with electronic location and access information (USMARC field 856), for Internet-accessible materials.

If you're responsible for creating or maintaining your library's home pages, you want to consider joining the WEB4LIB discussion list and archive at <http://sunsite.berkeley.edu/Web4Lib> or the MEDWEBMASTERS-L list at:

<http://pharminfo.com/conference/MWM-L.html>

On the Editor's Desk

Book Reviews

This is our work : the legacy of Sir William Osler. Ted Grant with introduction by Douglas Waugh, MD. 1994. ISBN: 0-969-8568-0-6. (To order, see address following review.)

Sir William Osler, physician, teacher, historian, bibliophile and bibliographer, is considered "one of the most influential men in the history of medicine".

Osler encouraged students to learn at the bedside and browse around libraries. His humanist method of practicing medicine was integrated into his 1892 textbook *The principles and practice of medicine*, now in its 23rd edition. His legacy lives on in medical schools, libraries and societies around the world as they continue to promote his philosophies and approaches to medical education and practice, and his appreciation for historical medical books.

Ted Grant, an award-winning Canadian photographer, chose to unite his photographs with Osler quotations to enhance his images - and it works. He conceived the subject for the photographs before he underwent anaesthesia for neurosurgery. While looking up from the operating table, he saw bright lights, people in action, and "shiny metal equipment" and felt it would make a great shot. Later he obtained permission from his doctor to spend a week documenting his work as a neurosurgeon and expanded his project to include other specialties and hospitals. Using a camera with a "near silent shutter" and highly light-sensitive film, the photojournalist worked unobtrusively.

This is our work is three books in one: a biography of Sir William Osler (1849-1919), a photographic essay of health professionals at work and a compilation of quotations related to the practice of medicine. The title was taken from one of Osler's quotations: "To prevent disease, to relieve suffering and to heal the sick - this is our work". It pays tribute to Osler's timeless impact on the medical field.

The biography section, presented over nine stages in Osler's life, is well-researched and presented by Dr. Douglas Waugh, a Canadian author and editor. It is beautifully accompanied by archival photographs from the Osler Library of the History of Medicine at McGill University. Waugh's introduction is complemented by three essays from others familiar with Osler's legacy. They represent the American Osler Society, McGill's Osler Library and

Osler's home the Open Arms. Additionally, institutions where Osler taught, inspired, or lived in the United States, Canada and England are mentioned in the essays.

Ted Grant's black and white photographs show doctors, nurses, student and patients in orthopaedics, neurology, cardiovascular medicine and family medicine settings - areas "the lay person could relate to ...". The most human photographs include doctors touching patients; photographed from behind, a doctor listening to a patient's chest, his hand on the patient's back (the cover photo); a doctor's finger in a baby's hand; a wide smile on a doctor's face as he presents a newborn to its mother; a doctor examining a child's throat while sticking out his own tongue so a small child can mirror it. A quotation from Robert Tuttle Morris - "It is the human touch that counts for most of our relations with our patients" - highlights an important aspect of Osler's patient-centred philosophy.

Although most quotations are from Osler's prolific works, there is an interesting variety of quotations ranging from Hippocrates, Galen and Paracelsus to Florence Nightingale, Marie Curie, and Walt Whitman. I would have liked to have seen dates attributed to the quotations to put them in perspective and to truly appreciate their timelessness.

One negative point about the arrangement of the book: Ted Grant's introduction should appear before Osler profile's to set the stage. However, *This is our work* is an elegant gift or library book that would appeal to health professionals looking for inspiration, historians interested in Osler's influence on medical education and practice, or health sciences librarians who appreciate medical history and quotations. ■

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Order copies of this book from: Ted Grant, c/o 1817 Feltham Road, Victoria, BC V8N 2A4. Telephone: 250-477-2156, Fax: 250-477-2156, E-mail: tedgrant@islandnet.com, URL: <http://www.islandnet.com/~tedgrant>

Gentlecare : changing the experience of alzheimer disease in a positive way. Moyra Jones. Burnaby, BC : Moyra Jones Resources, 1996.

Moyra Jones' Gentlecare system is defined as a "prosthetic system of dementia care designed to change the experience of dementing illness for the afflicted person, the family and the professional caregiver". The system is explained here in seven modules.

The first module presents a pathology-philosophy-paradigm. Jones states that anyone caring for persons with dementia must value the impaired person's dignity and worth and place dementia within a social context and beyond the biomedical. Understanding where individuals are within a disease process can be determined by accurately assessing behavioural deficits. Caregivers can then develop the supports - or "prosthesis" as it is called here - and the appropriate approaches, strategies and environment for optimum care.

The second module focuses on multidimensional functional assessments to determine the patient's strengths and deficits, including how the individual functions in his/her own environment. The next four modules describe the implementation of the Gentlecare plan; included are discussions of power point programs, nutrition, homematch and the importance of therapeutic partnerships.

Jones' work in environmental prosthesis is excellent. She poignantly compares a usual institutional setting with her envisioned system through well-chosen pictures and narrative. She presents convincing evidence that a thoughtful and appropriate environment not only promotes function, socialization, comfort and safety, but offers dignified, normal living for patients. She reminds us that institutions are not places where staff members work, but places where many people live.

Jones' *Gentlecare* is an ambitious and comprehensive guide (over 600 pages) for persons involved in caring for those with dementia. Although Jones is highly critical of the current health care system as it relates to people with dementia, I think many care providers share her vision. Her selected topics are covered in detail and in-depth, and she generously uses visual aids (although the butterfly icon used as a symbol throughout the book is somewhat distracting).

The language of *Gentlecare* is sophisticated and there is a fair amount of professional jargon used, which may limit its audience. Jones makes her point that new directions for dementia care based on a different set of assumptions are needed. I recommend *Gentlecare* as a reference for organizations developing and improving living/care conditions for persons with dementia as well as for patients' families and caregivers. ■

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Standards for Library and Information Services in Canadian Healthcare Facilities. CHLA/ABSC Task Force on Standards for Library and Information Services in Canadian Healthcare Facilities. 2nd ed. Toronto, Ont.: CHLA/ABSC, 1995. ISBN: 0-9692171-4-5.

Since 1995 the Canadian Council on Health Service Accreditation has been implementing a new accreditation process. The new CCHSA standards and review process are more client-centred and

outcomes-focused than ever before. In 1993, in response to the CCHSA initiatives to revamp the accreditation process, CHLA/ABSC created The Task Force on Healthcare Facility Library Standards. The Task Force's objectives were to 1) work with the Canadian Council on Health Service Accreditation "in identifying and responding to changes in the CCHSA standards that apply to hospital libraries," and 2) to "revise and update the CHLA/ABSC Standards document as required"[1]. In 1995 the revised documents of both groups were published.

In language, form and intent, the *Standards for Library and Information Services in Canadian Healthcare Facilities, 2nd ed.* reflect the new CCHSA standards. For newcomers to either set of standards the language, the form and even the intent may be baffling. My recommendation is that you begin at the end. Read the introduction to the CHLA/ABSC standards, then move on to the *Self-Evaluation Checklist*, which is the last section of the book on pages 70-85. This will help you to immediately focus on the objectives and outcomes of your information service. After using the checklist go back and read the standards, especially in those areas where your service is weak.

(I like the checklist so much that I would encourage CHLA/ABSC to consider releasing this section of the document from the copyright restrictions that pertain to the rest of the publication. A "permission to copy" note on the *Self-Evaluation Checklist* would support the stated intent of the list, which is "for on-going self-assessment to document service development over time, as a basis for planning and development activities, and as background documentation for CCHSA surveyors, and facility-wide quality improvement initiatives".) (2)

The CHLA/ABSC *Standards* are grouped into four areas: *Planning and Development, Organization and Administration, Resource Management, and Information Services Provision*. Each standard is stated in one or two sentences and is followed by an interpretation.

The interpretation is then followed by criteria that support the standards. I would like to see the document simplified by deleting the interpretation paragraphs and integrating their content into the standards statement, the criteria or the summary section which precedes each of the four groups of standards. Nonetheless, the standards and supporting criteria themselves are very appropriate to today's health and information environments and needs.

The CHLA/ABSC *Standards* themselves fill only the first twenty two pages of the publication. Three quarters of the document is devoted to the following practical supporting materials:

- seven page glossary of terms,
- sample mission statement,
- sample vision statement,
- sample needs assessment survey,
- sample position description for the Director of Library and Information Services,
- sample client satisfaction survey,
- list of issues for consideration before entering a contractual arrangement,
- twelve-page bibliography of background reading,
- eight-page key to the CCHSA Standards,
- seventeen-page self evaluation checklist.

The 1995 *Standards for Library and Information Services in Canadian Healthcare Facilities* is a document that points Canada's library and information service providers in the right direc-

tion—toward our information service users. It is now up to information professionals to implement the standards and move individually and collectively in the direction that the CHLA/ABSC membership has endorsed.

If you have not yet purchased a copy of the *Standards*, you can do so by mailing your order to: P.O. Box 94038, 3332 Yonge Street, Toronto, ON M4N 3R1, Canada. The price, including postage and handling is \$30.00 for CHLA/ABSC members and \$35.00 for non-members. All orders must be prepaid in Canadian funds, and payable to CHLA/ABSC.

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Career planning and job searching in the information age (The Reference Librarian, No. 55). Elizabeth Lorenzen (Ed). Bingham, NY: Haworth Press, 1996. 120 p. ISBN: 1-56024-838-6. \$39.95 US.

A follow-up volume to *Library services for career planning, job searching and employment opportunities* (1992), these papers show how electronic resources, specifically Internet, have had an impact on career planning and job searching in libraries and career centres. A myriad of Internet resources for career planners, job seekers and those who design resources and programs for user groups are cited throughout.

The book is organized into five sections: 1) issues, 2) resources, 3) services to special groups, 4) collaborative efforts and 5) access considerations. The first appendix has a handy feature listing all Internet addresses (URLs) mentioned in the essays. A bibliography for additional reading and collection development activity comprises the second appendix.

The 1996 editor, Elizabeth Lorenzen, alerts readers to the changing role of librarians in the electronic frontier. Meanwhile Byron Anderson, editor of the 1992 volume, presents an overview of Internet development, barriers to learning and teaching, tips for overcoming barriers as well as touching on major Internet job sites.

The 1996 papers overlap in discussing Internet tools such as listservs, usenet newsgroups, telnet, gopher and the World Wide Web (WWW). One noted author, however, is Margaret Riley, creator of the respected and much cited WWW site *Employment Opportunities and Job Resources on the Internet*. Though many of

the general sites cover career development, scant information is provided on self-assessment, career decision-making/goal-setting, career changes, contract employment and life-long career development.

The article by Catherine Lee, Head Librarian at Penn State Dubois Campus, on tailoring reference and job search services for generation X clients is a highlight. Eight typical "X" factors provide a backdrop to a discussion of reference, collection resources and modes of delivery to optimize service to generation X. The concrete, useful suggestions are welcome for both career development and reference service in general.

The special groups section details the 20 year evolution of Alumnae Resources - a career networking support group for liberal arts graduates. Bonnie Willdorf, director of the group's Resource Centre, explains how these electronic resources were introduced and what measures were taken to facilitate members' adaptation to new resources.

Collaborative efforts is the focus of two papers that include planning outlines and product samples. At DuPaul University, the library and university career services have formed a partnership to deliver job search services to the community. Activities include librarian preparation of strategy sheets for companies that conduct on-campus interviews. At the University of Michigan, the design and implementation of a career information gopher involved staff from several units. The final structural outline of the gopher service might be useful to others setting up similar gopher or WWW sites.

The book concludes with a discussion of security and privacy issues in electronic job searching. Electronic privacy is defined and pertinent US court cases and legislation are summarized. While not Canadian, the issues of confidentiality and security, employer access to computer files and email, encryption and firewalls should be of general interest to most librarians.

This volume is not a complete follow-up to its 1992 counterpart. The 1992 volume profiles more special user groups, the unemployed, workers in transition and people with disabilities. It contains more content from other types of libraries. This volume excludes initiatives and applications from settings outside of academic libraries - secondary schools, public libraries, job clubs.

The papers here are generally clearly stated, well-organized and of interest to librarians, career counsellors, career planners and job seekers. There is scope for additional research and projects that increase broader Internet availability of career planning resources, in all settings. ■

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(The reviewer is on her third career change, entering librarianship after 10 years in the construction trades as a journey status painter and decorator. Her current position is her fourth library contract position since graduating with her MLIS in 1994.)

DOCLINE in Canada Newsletter from CISTI

April 1997

Bev Brown

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What's New?

- New DOCLINE Libraries
- Invoices from CISTI
- Presentations
- CISTI SERHOLD Tape
- Updating SERHOLD
- Telnet Connections

New DOCLINE Libraries

Four libraries have recently joined DOCLINE:

- i) Vernon Jubilee Hospital (Vernon, BC)
- ii) Royal Inland Hospital (Kamloops, BC)
- iii) Addiction Research Foundation (Toronto)
- iv) Hincks Centre for Children's Mental Health (Toronto)

Paul Ward has entered SERHOLD data for 5 of the 14 Manitoba libraries. CISTI has added holdings for the Ottawa General Hospital and Kelowna General Hospital.

The *Canadian DOCLINE Participants* list is being constantly revised as libraries join DOCLINE. Copies can be requested anytime from the Coordinator.

Invoices

Invoices for 1997/1998 for CISTI fees have been mailed to libraries that were active on DOCLINE as of February 1997. For administrative ease, invoicing is now done once a year in February/March for the following year. The plan is to move the current manual method of DOCLINE invoicing over to CISTI's automated system for the 1998 billing.

Presentations

In March, two half-day DOCLINE presentations were given to members of the Toronto Health Science Information Consortium. A DOCLINE presentation is being prepared for September for the health libraries section of ASTED (the Quebec provincial library association).

CISTI SERHOLD Tape

CISTI will send its last SERHOLD tape at the end of April. This tape updates holdings for CISTI and 28 libraries that report through CISTI. Once data is loaded into SERHOLD in May or early June,

CISTI staff will correct Level X holdings to Level 3 for these libraries. This project will take 3 to 4 months and will result in more precise routing of requests for all DOCLINE users. For more detailed information on CISTI and SERHOLD updating, please see the *CISTI Follow-up to the Discussion Paper on Resource Sharing for Health Sciences Libraries in Canada* (February 1997). Copies are available from the Coordinator.

Though CISTI no longer updates via tapes, CISTI coordinates the submission of tapes to NLM for libraries wanting to update via tape load.

Updating SERHOLD

CISTI is making available to all libraries a service to update SERHOLD directly online. The cost varies from \$.20 to \$.35 per title based on data provided. A factsheet will be available at the CHLA/ABSC Conference in Vancouver. For information and guidelines for submitting holdings, please contact the Coordinator. For libraries wanting to add or revise their holdings, accounts for logging on to SERHOLD and a procedures manual are available.

Telnet Connections

A few DOCLINE users have complained over the past few weeks that DOCLINE is very slow or not accessible. Before reporting problems, please do the following:

1. keep a log over at least 3 or 4 days of when you tried to connect and what happened;
2. log on at different times of the day;
3. try telnetting to other sites and compare results;
4. talk to your technical support staff to make sure the problem is not within your institution;
5. talk to your colleagues to find out if they have connection problems.

Pass this information to me and I will discuss the problems with NLM.

Congestion on the Internet is often to blame for slow response times. QuickDOC offers some relief as you spend less time interacting with NLM's computer. A useful approach to solving the problem is to avoid busy times in the eastern time zone, though logging on at 6:00 pm in Calgary, for example, may not necessarily ensure a quick and reliable connection. ■

Mise à jour de DOCLINE

avril 1997

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Mise à jour de DOCLINE

- Nouvelles bibliothèques DOCLINE
- Factures de l'ICIST
- Présentations
- Bande SERHOLD de l'ICIST
- Mise à jour sur SERHOLD
- Connexions Telnet

Nouvelles bibliothèques DOCLINE

Quatre bibliothèques ont récemment adhéré à DOCLINE :

- i. Vernon Jubilee Hospital (Vernon, C.-B.)
- ii. Royal Inland Hospital (Kamloops, C.-B.)
- iii. Addiction Research Foundation (Toronto)
- iv. Hincks Centre for Children's Mental Health (Toronto)

Paul Ward a entré les données SERHOLD pour 5 des 14 bibliothèques manitobaines. L'ICIST a entré les données pour l'hôpital Général d'Ottawa et le Kelowna General Hospital.

La liste des *Participants canadiens à DOCLINE* s'enrichit constamment. Vous pouvez en obtenir une copie à jour en communiquant avec la Coordonnatrice.

Factures de l'ICIST

Les factures des frais de l'ICIST pour 1997-1998 ont été postées aux bibliothèques faisant partie de DOCLINE depuis février 1997. Histoire d'en faciliter l'administration, les factures seront maintenant produites une fois l'an, en février/mars pour l'année à venir. On espère pouvoir passer à la facturation automatisée sur le système de l'ICIST pour la facturation de 1998.

Présentations

Nous avons offert deux présentations sur DOCLINE d'une demi-journée aux membres du Toronto Health Science Information Consortium, en mars. Nous prévoyons faire une autre présentation du genre en septembre, à l'intention des bibliothèques de la santé de l'ASTED, au Québec.

Bande SERHOLD de l'ICIST

L'ICIST enverra sa dernière bande SERHOLD à la fin d'avril. Elle contient la mise à jour du fonds documentaire de l'ICIST et de 28 bibliothèques qui signalent leur fonds documentaire par l'entremise de l'ICIST. Une fois les données chargées dans SERHOLD (en mai ou en juin), les employés de l'ICIST commenceront à corriger les entrées de niveau X pour les modifier au niveau 3 pour

ces bibliothèques. Ce projet devrait durer de 3 à 4 mois et résultera en l'acheminement plus efficace des demandes pour tous les usagers de DOCLINE.

Pour obtenir de plus amples renseignements sur la mise à jour des données SERHOLD, reportez-vous au document *Suivi de l'ICIST quant au Document de travail sur le partage des ressources par les bibliothèques de sciences de la santé canadiennes* (février 1997). Vous pouvez obtenir ce document auprès de la Coordonnatrice.

Bien que l'ICIST abandonne la mise à jour par bandes, il continuera à coordonner la soumission des bandes à la NLM pour les bibliothèques qui désirent soumettre leurs données de cette façon.

Mise à jour sur SERHOLD

L'ICIST offre aux bibliothèques de mettre à jour pour elle leur fonds documentaire sur SERHOLD, en direct. Le coût varie de 0,20\$ à 0,35\$ par titre, selon les données soumises. Un dépliant sera préparé pour la conférence de l'ABSC/CHLA à Vancouver. Pour obtenir de plus amples renseignements et les directives de soumission de données, veuillez communiquer avec la Coordonnatrice. Nous offrons aussi des mots de passe d'accès et des manuels d'instructions pour les bibliothèques qui désirent ajouter ou réviser elles-mêmes leur fonds documentaire sur SERHOLD.

Connexions Telnet

Certains usagers de DOCLINE ont indiqué au cours des quelques dernières semaines avoir des problèmes à entrer en communication avec DOCLINE. Avant de nous faire part d'un problème, nous vous prions de faire les suivantes : prenez note, pendant au moins 3 ou 4 jours, des moments où vous tentez d'entrer en communication avec le système et de ce qui se passe; essayez d'ouvrir vos séances à différents moments de la journée; établissez des connexions Telnet avec d'autres sites et comparez les résultats; communiquez avec votre service technique afin de déterminer si le problème ne provient pas de votre organisme; discutez avec vos collègues pour savoir s'ils ont également des problèmes de connexion. Ceci fait, soumettez-moi toute l'information pertinente et je discuterai du problème avec la NLM.

Les problèmes sont souvent imputables à la congestion sur l'Internet. QuickDOC pourrait améliorer la situation puisque son utilisation exige moins d'interaction avec l'ordinateur de la NLM. Vous voudrez peut-être aussi essayer d'éviter les heures de pointe, mais ceci n'est certes pas une solution miracle compte tenu des fuseaux horaires du pays et, de fait, du monde entier. ■

CHLA/ABSC Task Force on Benchmarking for Health Libraries

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Background

There is currently little information available regarding the activities, resources and services of health libraries in Canada and the limited data that has been collected is often not meaningful or comparable. CHLA/ABSC members have clearly indicated the need to develop effective ways to monitor and evaluate library performance, and assess the impact of the resources and services that they provide.

The CHLA/ABSC Task Force on Benchmarking for Health Libraries has been established to develop 1) a benchmarking instrument for use among Canadian health libraries and 2) a process for the collection, analysis and distribution of the information.

The hope is that this instrument will provide libraries with a practical way of comparing their activities, services and impact with those of other libraries in order to identify "best practices" and flag areas of potential opportunity, improvement and excellence.

Development of Benchmarking Instrument

In the fall of 1996, the Task Force began its work on the benchmarking instrument. Preliminary information on the instrument and the survey process was presented to the CHLA/ABSC membership at the 1997 Annual Meeting in Vancouver. Following this, the Task Force plans to recruit a small group of libraries committed to participating in a pilot survey. The focus of the Task Force is to develop an instrument that will provide consistent, comparable, and meaningful measures for use in benchmarking and a process for collecting this information that encourages ongoing participation and long-term sustainability.

Feedback Appreciated

If you have developed or are aware of any library performance indicators that you feel are particularly useful for either internal or external benchmarking, the Task Force would appreciate hearing from you. Questions regarding the work of the Task Force can be directed to the members at the addresses and phone numbers listed below.

Task Force Members

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CHLA/ABSC Task Force on Benchmarking for Health Libraries

Revised Terms of Reference (February 1997)

Mandate

The purpose of this Task Force is to develop and pilot test a practical benchmarking instrument for Canadian health libraries and a proposal for implementation.

Responsibilities

1. To consider the relationship to other data collection efforts such as the National Core Library Statistics and the Annual Statistics of Medical School Libraries in the United States and Canada.
2. To determine what benchmarking data would be useful to health libraries and their organizations.
3. To develop an instrument that will be suitable for hospital, academic and other libraries in relevant health care organizations.
4. To recommend a process for the ongoing administration, evaluation and revision of the benchmarking instrument and dissemination of the data.

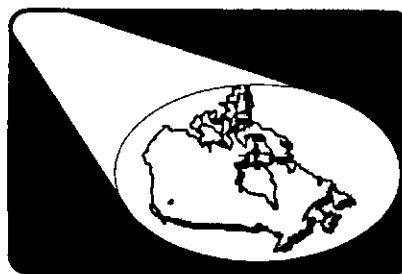
Organization

- The Task Force will consist of co-chairs and two other members appointed by the CHLA/ABSC Board. The Task Force may second other association members to assist as needed.
- The Task Force will provide progress reports at each CHLA/ABSC Board Meeting and to the general membership at the Annual Meeting.
- Budget requests are to be submitted to the CHLA/ABSC treasurer at least one month prior to the Fall Board meeting.

Term

The Task Force shall present its proposed timeline to the Board at the Winter 1997 Board meeting. A pre-tested draft data collection instrument will be presented to the membership at the 1997 Annual Meeting to obtain feedback. The finalized instrument and recommendations for implementation will be presented at the Winter 1998 Board meeting. ■

SPOTLIGHT ON ALBERTA



Provincial Mental Health Advisory Board (PMHAB) Learning Resource Centre at Alberta Hospital Ponoka

Judy Osborne

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Introduction

In January, 1997, I began a three-year leave from the University of Calgary Medical Library to become Librarian at Alberta Hospital Ponoka (AHP). My assignment at AHP is to plan and manage the transition of the library from a local resource to one that meets the information needs of mental healthcare professionals and clients across the province. Four months into this new venture, I would like to thank *BMC* for the opportunity to acquaint CHLA/ABSC members with the hospital, the resource centre and its changing role.

Hospital History and Background

The first psychiatric hospital west of Manitoba was constructed on the Ponoka site and opened in 1911. A few beautiful, old buildings are still in use. They are an interesting architectural contrast to the state-of-the-art brain injury rehabilitation unit, activity centre and education complex that opened here in the 1990s.

The building styles reflect parallel changes in the role of the hospital from its spa-like asylum beginning, through custodial institution to active treatment centre. Since the introduction of drug therapies in the 1950s, long-term custodial care ceased to be the norm. The majority of psychiatric patients receive treatment for the acute phase of their illness and then return to their communities.

In 1937, at its historical highest, the inpatient population reached 1,685. The hospital currently has a capacity of 350 inpatient beds and serves 130 outpatients. Education and research have always been an integral part of hospital activity. The hospital

incorporated its own three-year diploma psychiatric nursing program in 1931 and a four-year degree course the following year.

With the recent closure of all hospital-based nursing programs in Alberta, it now accommodates the Grant MacEwan Community College two-year psychiatric nursing diploma program. Occupational therapy, malerial therapy for general paretics, psychotherapy, and group therapy are examples of treatments introduced here well ahead of their general acceptance at other hospitals. Today innovative programs are in place for the treatment of alcohol and drug addiction, psychogeriatric disorders, and for the rehabilitation of patients with brain injuries.

This facility, its counterpart in Edmonton, care centres in rural Claresholm and Raymond, and the community mental health clinics throughout Alberta now come under the direction of the Provincial Mental Health Advisory Board (PMHAB).

Mental Health Service Restructuring in Alberta

Government restructuring of health care in Alberta has placed the management of general health care services with 17 Regional Health Authorities. For the time being, mental health services are provincial and are exempted from that regional model.

The nine-member PMHAB was appointed in 1996 to advise the Minister of Health on service organization and delivery. Services may yet be divested to the Regional Health Authorities in the future or a model similar to that of the Alberta Cancer Board may yet be developed. Whatever the final model, the intention is to create a community-based and consumer-focused mental healthcare system. Specific programs and organizational support functions, in-

cluding library services, are being planned for province-wide consolidation.

Three Libraries In One

Having worked as a hospital librarian in the past, I made some assumptions about what this library might be like. Few were correct. In fact, there are three libraries here - one medical, one school and one public. The medical and public collections share the LRC space but are divided by their NLM and Dewey classifications. The school library is a separate entity within the Patients' School.

The medical collection serves the physicians, psychologists, social workers, faculty, nursing students, hospital administrators, recreation, occupational and speech therapists and other professional and support staff who make up the 700 full-time hospital staff. The collection's strengths are psychiatry, psychology, nursing, gerontology, neurology and rehabilitative therapies. It includes 200 journal, newsletter and newspaper subscriptions, approximately 3,000 monographs and 300 audiovisual programs.

Database access includes PsychLIT, MEDLINE, CINAHL, HealthSTAR and QP Source in CD-ROM format. The library provides customers with a public Internet workstation and its use is rapidly increasing as clients become familiar with what it has to offer.

The small "public library" collection comprises general reference material, consumer health information, and leisure reading, listening and viewing materials for inpatients and their families. It includes large print material and talking books. The Wolf Creek School Division operates the Patient School at the hospital and its library houses specialized materials for teaching clients whose injuries have resulted in cognitive and physical disabilities. The school classroom is equipped with assistive devices that maximize the students learning abilities.

The three-library situation provided unique opportunities for networking and resource sharing. Mutually beneficial informal arrangements are in place with the Town of Ponoka Public Library, Parkland Regional Library and the Patient School to share materials and expertise.

Sharing the Information Service

The first step in expanding our service to mental health professionals across the province was the easiest. Due to budget reductions, the Alberta Health Library reluctantly discontinued its current awareness service to staff at the province's sixty mental health clinics. After consultation with Peggy Yeh, Librarian at Alberta Health, we were able to continue that proven, and much-appreciated service. The hospital library already provided this service to inhouse clients. With the addition of a full time clerk, and by adding twelve new journal subscriptions, we were able to expand our client base to include psychologists, social workers, nurses and administrators in the clinics. For now, government courier service and fax are used to deliver the information to these groups.

Next, we replaced our DOS-based automation system with a Windows-based DB/Textworks and made the library catalogue and services available over a Windows-Intranet. To date, this new service will be for onsite staff only, but dial-in access from outside is being discussed as a possibility.

The next step in expansion are Intranet, Internet and WWW-dependent. As yet, few staff at the Ponoka site have desktop Internet access, though most are connected to the local Windows NT server. Recently, all mental health clinics in Alberta have been provided with microcomputers, modems, and Telus PLAnet accounts. Staff at the hospital and in the clinics are beginning to incorporate the use of e-mail into routine communications. PMHAB Information Systems and Staff Development personnel, located here and at Alberta Hospital Edmonton, are beginning to address basic Windows, e-mail and associated telecommunication training needs. There is potential to introduce the Health Knowledge Network (HKN) and CARL UnCover to make our collections and services available over the PMHAB home page.

During the summer of 1997, library staff will make site visits to the Mental Health Clinics to assist in the transition from paper-based to electronic information delivery. We look forward to further cooperation with other libraries and to the expansion of our service to better serve our clients throughout Alberta. ■

A Merger Among Regionalizations : The Building of New Library Partnerships

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Background

In Edmonton, the creation of a centralized Capital Health Authority (CPH) was the first step that accompanied downsizing, outsourcing, in-sourcing and regionalization of healthcare.

Next, the CPH - now Capital Health - planned to move the Northern Alberta Regional Geriatrics Program (NARGP) from the General Hospital to the Glenrose Rehabilitation Hospital. NARGP was the largest part of Edmonton General (EGH) and was one of three hospitals making up the Caritas Health Group. The other two hospitals were renamed as "Community Hospitals" because many Edmontonians did not realize that these hospitals continued to operate fully functioning emergency units.

At this time, the regionalization of pharmacy, labs, food and other services had begun. It was in this climate of cuts, uncertainty and fear that the merger planning and commissioning occurred.

Outsourcing within the CPH Libraries

A second level of uncertainty concerned the libraries within the Capital Health region and the delivery of services. The University of Alberta Library (UAL) proposed a complete contracting out of all services from Capital Health to UAL. Capital Health library staff were consulted in the UAL's proposal development. This proposal was received more than a year ago, but nothing has happened as yet.

More recently, a library consultant was hired by Capital Health to examine options for delivery of library services within the region. A network model has been proposed, based on strong existing relationships with the University, specifically HKN and NEOS (see *BMC* 18(3):108-9).

The Merger

The climate for a merger could not have been more difficult. The title of one book in our collection said it all: *The death of truth and trust : the first victims of downsizing*. Many meetings were held to discuss space, a very contentious issue in a hospital working at full capacity. Until renovations were complete, rumours circulated that the merger was off.

The relationship of the two merged libraries was dramatically more cooperative, open and supportive than most other departments. In some ways, this was remarkable as the libraries were the

only two areas actually merging. Almost everyone else involved was moving into a parallel structure, but not merging.

It was made clear that there would be no layoffs in the libraries. Existing positions merged well into one staff. The library staffs knew each other - we were part of NEOS and tried to focus on our new combined pool of clients.

The portion of Edmonton General's library budget and collection to be moved was based on existing usage statistics and estimates. Because these decisions were made by Caritas staff, there were some difficult discussions involving Caritas employees who remained and those who had to move.

The project architect's first plans for the library were very impressive. Unfortunately, they required the total demolition and rebuilding of the library, audiovisual services and two meeting rooms. The final plans took advantage of wasted hallway space and a surplus furniture storage room. The extra space made it possible to create a remarkably attractive and improved area to hold the combined staff and collections. The money not spent on the first library renovation allowed fuller development of meeting space elsewhere in the hospital.

The Glenrose Library remained open throughout the renovations, despite noise, dust and confusion. Although working conditions were terrible at times, being there to answer questions and identify problems was definitely worthwhile.

Merger results

One year has passed since the merger and a great deal of progress has been made. Different corporate cultures are now better understood* and we are moving together.

The combined resources of two merged libraries have resulted in a stronger library. Capital Health is talking about stability and support for staff, although the budget for this fiscal year is unknown. We continue to have hope; we look forward to being able to focus on service delivery, our clients and better clinical outcomes.

In the next few months, the Regional Library issues are scheduled to be discussed by the Capital Health Senior Management Group. Changes will continue and progress will be made. Libraries will continue to be leaders in cooperative efforts, in focussing on client needs and appropriate use of technology within Capital Health.

■

The John W. Scott Health Sciences Library 1995 - 1997 : Changes and Challenges at the University of Alberta

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Introduction

The last two and a half years have seen many changes at the John W. Scott Health Sciences Library. Merging the directorships of the Health Sciences and the Science and Technology libraries meant that one position called Associate Director, Science and Technology and Health Sciences Library, was filled - in this case by Margo Young in early 1995.

Changes in Reference Service: Two-Tiered System

A three day "Rethinking Reference" retreat was held in August 1995. Its purpose was to evaluate how we had been providing reference service and to investigate other service models that might prove more effective.

We decided to move to a new two-tiered reference system consisting of 1) an information desk and 2) a consulting office. Staffed by reference assistants and librarians new to reference service, the information desk would be located at the Circulation and Reference counter and deal with directional and quick reference questions. Extended reference questions would be referred to the Consulting Office staffed by experienced reference librarians. This was operational by August 1995.

To say the least, the integration of service points was not a success. Staff felt crowded; service-point noise was high; customers were confused about where to go; reference staff were located away from heavily-used reference sources; the view between Consulting Office and the Information Desk was blocked by a pillar, making it difficult to see line-ups.

The merging of library service points would not work unless major changes were made. Funds were not available to do major renovations, so at a second reference retreat held in January 1996 we decided to move reference services back to its original location.

The change to two-tiered reference was not as successful as we had hoped. The major problem: how to decide when a question would be best handled by Information Desk staff and when a question needed to be referred to the Consulting Office. Questions that seemed straight-forward would evolve into something complex. Information Desk staff, who were capable of dealing with all questions, finished the question rather than passing it to the Consulting Office. While the Information Desk staff member finished the evolving question, line-ups would form; the Consulting Office

staff would then answer simple questions, contrary to what had been intended.

It is quite likely that we will revisit the issue of two-tiered reference if and when non-professional staff new to reference are added to the reference staffing component.

An Increased Emphasis on Bibliographic Instruction

To cope with increase demand, we decided to place more emphasis on bibliographic instruction. Throughout 1995 and 1996, the number of sessions taught and students reached increased. Simultaneously, the demand for services at the Reference Desk/Office decreased. We have decreased the number of staffing hours allotted to the reference desk as a result and have cut back to one person on the desk until 1:00 pm.

Growing interest in evidence-based medicine has required us to go beyond teaching "basic" database searching skills to health sciences students and to enhance this with instruction on retrieving the type of information that forms the "evidence base", incorporating elements of critical analysis.

We believe that the decrease in demand for reference services is a direct result of our increase in teaching. Staff have observed that increasing numbers of students are self-sufficient when it comes to using library resources. Health science librarians are getting less of the "how do I use" questions and more of the "I was searching MEDLINE, but could not find what I needed. Do you have any suggestions?". Our effective bibliographic teaching program seems to be the source of this change.

Ongoing Changes to Management Structure

The Library reporting structure prior to the retreat in 1995 is best described as a "hierarchical matrix". Library staff reported to one or more supervisors based on the task undertaken.

A move toward a more team-based approach created three teams:

1. Information Services Team - for those involved in working on the Information Desk.
2. Instruction Team - for those heavily involved in teaching and bibliographic instruction.
3. Collections Team - for those involved in collection development functions and activities.

The teams were not mutually exclusive. Most staff belong to more than one team. The teams are structured differently to meet the needs specific to each team's mandate. Goals and objectives, and the means to achieve them, are developed by all members of a given team.

The Library had been run by a "management team" but was transformed into a "transition team" and later called the "Coordinating Team". This team was responsible for ensuring that the changes arising from the retreats were implemented. The Coordinating Team now consists of a representative of each team plus the Circulation Supervisor and the Director of the Science and Technology and Health Science Libraries.

What does the future hold?

We have submitted a proposal for funds to establish a computer lab in the Health Sciences Library. As teaching commitments increase, it is more difficult to book suitable rooms to provide instruction. Having an on-site lab will allow us to deliver more effective bibliographic instruction on equipment set up for our own needs.

In November 1996, our Associate Director resigned to take up a new position at the University of California at Riverside. A search for a new Associate Director is now underway. As of April 1997, we await the announcement of the new librarian hired to fill this position. ■

Reorganizing Acute Care Sector Libraries : The Calgary Regional Health Authority Experience

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Introduction

The Calgary Regional Health Authority (CRHA) was formed by provincial mandate in 1993. At that time, the region was divided into four healthcare sectors: 1) the Acute Care Sector (the hospitals), 2) the Continuing Care Sector (home care, geriatric and rehabilitation), 3) Public Health and 4) Management and Support Services.

Acute Care Sector Libraries

The Acute Care Sector libraries were restructured under one librarian manager who reported to the Director of Education Services. At that time, libraries existed at Alberta Children's Hospital, Rockyview, Peter Lougheed, Calgary General and Foothills Hospital sites. Since then, we have been working to become one coordinated library on five sites, instead of existing as five separate entities.

At the outset, all library staff met as teams to draft standard forms, policies and procedures for new processes. We decided to centralize processes at various sites to reduce inefficiencies and duplication of effort. Each site has since started to use DOCLINE; each site continues to be responsible for its own interlibrary loans, circulation, reference and literature searches.

In the future, we plan to implement an integrated catalogue for the region which will comprise all five library databases and (from 1996 on) the holdings of various departments and nursing units within the hospitals.

Library As Purchasing Agent

The Library acts a purchasing agent for all journals, books and audio-visual material bought for the Acute Care Sector. Purchasing forwards all requisitions for these materials and for memberships to the librarian manager for signature. Our Purchasing Department allows standing purchase orders for the larger suppliers (e.g. Login Brothers) and we have a VISA card for the remainder.

Changes to Collections and Processes

Extensive cuts were made to the region's serials collection after we were able to ascertain what materials were being purchased

across the Acute Care Sector. To handle the journal cancellations and the accompanied loss of current awareness these journals provided, we subscribed to *SWETSCAN* and replaced cancelled titles with a TOCS (Table of Contents Service).

Journal subscriptions were reallocated to follow programs moving to different hospital sites and to compensate for closing the largest library in the region, the Bow Valley Centre Library.

The Bow Valley Centre Library is part of the Calgary General Hospital and is scheduled to close in June 1997. We have begun the process of reallocating collections to site libraries at the Peter Lougheed, Rockyview, Foothills and Alberta Children's Hospitals. We are allowing departments to come in and choose materials for department libraries and finding ways to deal with surplus materials.

Library Staff : New Responsibilities and Cross-Training

The Acute Care Sector Library staff are hard working, dedicated, exceptional employees. They have continued to offer a high level of service through turmoil and uncertainty and yet retain a sense of humour. Staff at each site took on increased responsibilities and mastered new challenges. Their union, the Health Sciences Association of Alberta (HSAA), has cooperated by allowing an intermingling of staff between sites. The flexibility has facilitated a centralization of library processes and has given staff opportunities for cross-training.

The Region continues to evolve, and change is constant. As the Bow Valley Centre closes, there will be new services and buildings opening at each site. The changes reflect a new era in health care and a new era for library service. This new era requires more sharing of resources between site libraries and across their historic boundaries, new levels of cooperation and new strategies for the future.

It is an exciting and traumatic time as we "ride the waves of change" in Calgary's ongoing restructuring of health services. ■

Canada-Wide Health and Medical Archives Information Network : Providing Advice and Services to Information Professionals

Centre for Research In Information Studies

Faculty of Information Studies
University of Toronto
140 St. George Street
Toronto, ON M5S 3G6

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Menu-based, voice messaging: 1-800-281-INFO (4636)

In Toronto, call: (416) 978-6738

E-mail: research@fis.utoronto.ca

URL: http://www.fis.utoronto.ca/research/hannah_infonet/welcome.htm

Introduction

The Health and Medical Archives Information Network is a non-profit reference, advice and communications service catering to researchers, medical practitioners, information professionals and custodians of healthcare and medical archives in Canada.

Its purpose is to help researchers, keepers of archival materials, and others locate answers to research questions as well as to help them obtain practical advice regarding health and medical archival issues.

The service also fosters professional networking by providing access to current news and information of interest to the archival/research community, such as announcements of upcoming meetings and conferences, professional education and training and new acquisitions.

The Network is administered by the Centre for Research in Information Studies at the University of Toronto and is principally funded by the Hannah Institute for the History of Medicine.

Who Can Use the Network?

- professional and volunteer archivists, records managers and curators;
- professional/amateur historians and researchers;
- health care practitioners, hospital administrators;
- other members of the archival and research communities.

What Type of Information is Provided?

- advice relating to keeping historical records and artifacts, such as appraisal and acquisition, finding aids, conservation and storage, and access guidelines for sensitive records;
- information about how to access historical resources and referrals to expert advisors such as health archivists;
- advice about caring for or providing access to archival or historical documents;
- information related to healthcare/medical archives in Canada

as well as how to announce events, programs and activities relating to the history of Canadian healthcare and medicine.

Research and Advisory Assistance

Users may request assistance from the network administrators or be referred to the following:

- various provincial/territorial archives advisors, travelling archivists and archive mentoring programs;
- provincial/territorial conservation advisors - where services do not exist to consulting conservator-advisors;
- professional access specialists and consultants with expertise in developing and applying access policy in relation to healthcare and medical records;
- health archivists at major archival institutions throughout Canada.

Research Resources

The Network maintains a list of guides, directories, union lists, bibliographies and other research tools for the history of Canadian medicine and healthcare as well as an annotated list of Internet resources and WWW sites. These are available at the Web-site or by leaving a message at the toll-free number.

Current News and Announcements

A listing of current and upcoming events, programs and activities is included on the Web-site. Educational training programs and professional development workshops of interest to the archival community and updated and maintained by the Network.

Some typical questions we answer:

- "Who can advise me about caring for my hospital's historical records?"
- "What should I do with my medical files and instruments when I retire?"
- "When will archives education course and workshops be held in my area?"
- "Where can I get help with my medical historical research?" ■

The Elaine Deluney Patient and Family Library : Making a Difference In the Fight Against Cancer

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Introduction

The Newfoundland Cancer Treatment and Research Foundation (NCTRF) is a provincial organization dedicated to diagnosis, treatment, supportive care, follow-up and research in cancer. NCTRF operates the Dr. H. Bliss Murphy Cancer Centre in St. John's and peripheral clinics located in Gander, Grand falls, Corner Brook and St. Anthony. Additional clinics are planned for other areas of the Island and Labrador.

There is a real need to provide accessible information about cancer within the province and individuals have a right to this information. NCTRF believes that the availability of this information is integral to total patient care: when patients and families have their information needs met, their participation in treatment planning and their sense of control in their experience is enhanced.

Plans for a Cancer Library

The Patient and Family Library began to develop plans in 1993. With a new Cancer Centre, the opportunity was presented to include a comprehensive library for patients and families. Elaine Deluney, Head of Technical Services at the Health Science Library of Memorial University, was instrumental in creating the new library. Elaine was a cancer patient. It was the merging of her personal experiences as a patient and her professional expertise as a librarian which contributed significantly to the Patient and Family Resource Library. She volunteered her free time to the planning and fulfilment of the project with energy and passion. Her efforts, and those of a committee comprised of staff, patients, family members and volunteers, were rewarded in October 1995 when the Patient and Family Library was officially opened.

Accessing Materials on a Broad Range of Subjects

Elaine's husband, Don Duffie, generously developed and donated a software package designed specifically for this library, ensuring that all materials were indexed for ease of access. The Library currently holds over 500 books, pamphlets, audio tapes and

video tapes covering a wide range of cancer related topics. Information is available on subjects such as types of cancer, conventional and complementary cancer treatments, side effects, nutrition considerations, available community services, coping with cancer, and explaining cancer to children.

Location and Mandate

The Library is staffed by volunteers and is located in Room 2005 on the Main Floor of the Dr. H. Bliss Murphy Cancer Centre. It is open Monday to Friday, from 10:00 a.m. to 4:00 p.m. (excluding holidays), to all patients, family members and support persons affected by cancer. Health care professionals and others are welcome to use the resources on-site but do not have borrowing privileges.

Those visiting the Cancer Centre can borrow materials by going to the library. Patients and their families involved in treatment at peripheral clinics have a limited selection of materials available to them. Library staff and volunteers are working on a provincial loan system to improve access to information, particularly for those outside the St. John's area.

Library dedicated to Elaine

Sadly, on October 14, 1996 Elaine Deluney passed away. To honour her personal commitment to the development of the Patient Family Library, the NCTRF renamed the Library in her memory. In January 1997, Elaine's invaluable contributions were acknowledged at a ceremony when the library was named The Elaine Deluney Patient and Family Library. Elaine's friends and colleagues presented a painting in her memory to be displayed in the Library.

The Elaine Deluney Patient and Family Resource Library will serve as a lasting tribute and contribution from one who knew all too well the real hopes and needs of patients. It was her spirit which helped create this Library - her spirit continues to live on in its ongoing development. ■

CANMEDLIB : Update to the Online Forum for Health Sciences Librarians and Related Professionals

Susan Cleyle
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Introduction

CANMEDLIB is the name of the Canadian Medical Libraries Interest Group listserv. Its purpose is to facilitate discussion of issues and dissemination of information important to Canadian libraries and librarians involved in the health care field. The list is unmoderated but is monitored by Susan Cleyle, IOLS Systems Librarian, Memorial University of Newfoundland.

What is CANMEDLIB? What is it not?

CANMEDLIB is a forum for questions, ideas and announcements that are of concern to health sciences libraries. CANMEDLIB does not accept advertisements from publishers or producers of software, etc. Questions about software and announcements for CANMEDLIB subscribers are appropriate.

How do I subscribe to CANMEDLIB?

To join the listserv and receive postings, send a "SUBSCRIBE CANMEDLIB" message to LISTSERV@MORGAN.UCS.MUN.CA. You may leave the list at any time by sending a

"SIGNOFF CANMEDLIB" or "UNSUBSCRIBE CANMEDLIB" command to LISTSERV@MORGAN.UCS.MUN.CA

How do I post a message to CANMEDLIB?

To send a message to all subscribers of the list, send your mail to CANMEDLIB@MORGAN.UCS.MUN.CA. This is called 'sending mail to the list', because the original mail is sent to a single address and the [LISTSERV](mailto:LISTSERV@MORGAN.UCS.MUN.CA) distributes copies to all subscribers. The address CANMEDLIST@MORGAN.UCS.MUN.CA is also known as the 'list address'.

You must never try to send a command to that address, as it would be distributed to all those who have subscribed. All commands must be sent to the [LISTSERV](mailto:LISTSERV@MORGAN.UCS.MUN.CA) address, LISTSERV@MORGAN.UCS.MUN.CA.

How do I obtain more information about CANMEDLIB?

By sending "INFO CANMEDLIB" command to LISTSERV@MORGAN.UCS.MUN.CA, you receive information about the list. This includes its purpose and certain restrictions for posting. For information on [LISTSERV](mailto:LISTSERV@MORGAN.UCS.MUN.CA) commands, send the "HELP" command to LISTSERV@MORGAN.UCS.MUN.CA.

CHLA/ABSC Chapter News

Saskatchewan Health Libraries Association (SHLA)

The Saskatchewan Health Libraries Association (SHLA) met twice in 1997. Our spring meeting was held on May 8th, 1997 to coincide with the Saskatchewan Registered Nurses Education Day and a fall meeting was held on October 8th, 1997.

At the spring meeting, Kelly Walker, the keynote speaker, spoke about *Coming together as a family of nurses : cooperation, collaboration, communication*. Kelly is a warm, entertaining and informative speaker whose life has been shaped by many therapeutic activities and she also maintains a classical and contemporary music career. His mission is to help people master the necessary skills to deal with change and modern-day stresses and to accept themselves as they are - a very appropriate topic for this day and age.

During the luncheon, Eric Cline, Saskatchewan's Minister of Health, spoke and answered questions regarding the state of health care in the province.

At the SHLA meeting, Alice Lalonde distributed copies of the new SHLA brochure for members to copy for their resource centres. Lynn Kozan updated the members on the progress of the Multi-type

Library Committee, which is currently working on a province-wide library information system called PLEIS.

The new Executive for 1996-1997 is Terry Bouchard, President; Alice Lalonde, Vice President; Bonnie Piercy, Secretary and Colleen Heichert, Treasurer.

The fall meeting was held on October 4th at the Saskatoon Cancer Centre. We reviewed SHLA's constitution and suggested changes. A committee was struck to develop a strategic plan for SHLA which will then be presented at our Spring 1997 meeting. Libraries in the Regina Health District are going ahead with DOCLINE implementation.

Discussion regarding fund-raising took place. Not all librarians were in favour of fund-raising so it was decided to leave this item to the Spring meeting. We were joined by the Saskatchewan Association of Library Technicians to hear speakers on the implementation of PLEIS. Some members joined SALT again Saturday morning for a workshop on the Internet.

Alice M.A. Lalonde
SHLA Vice President

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